

3-1109

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From: Mertz, Prema
Sent: Wednesday, March 31, 1999 2:27 PM
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Prema Mertz
Art Unit 1646
#308-4229
Rm 10E-01

STIC-Biotech/ChemLib

3-1028

From: Mertz, Prema
Sent: Monday, March 29, 1999 5:09 PM
To: STIC-Biotech/ChemLib
Subject: 08/927939

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Thanks
Prema Mertz
Art Unit 1646
Rm 10E-01
308-4229

Point of Contact:
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Mertz
08/927939

08/927939

L1 FILE 'REGISTRY' ENTERED AT 11:59:10 ON 31 MAR 1999
16 S EICADPKQKWVQ/SQSP

L2 FILE 'CAPLUS' ENTERED AT 11:59:36 ON 31 MAR 1999
18 S L1

=> d 1-18 .bevstr; sel hit 12 1-18 rn

L2 ANSWER 1 OF 18 CAPLUS COPYRIGHT 1999 ACS
AN 1999:96361 CAPLUS
DN 130:167179
TI Analogs of monocyte chemoattractant protein MCP-1
IN Barratt, Derek Graham; Needham, Maurice Ronald Charles
PA Zeneca Limited, UK
SO PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9905279	A1	19990204	WO 98-GB2179	19980721
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
PRAI	GB 97-15659		19970725		
	GB 97-15661		19970725		
	GB 97-15663		19970725		
AB	This invention relates to novel analogs of monocyte chemoattractant protein-1 (MCP-1) having substitution of an alanine, glycine, or threonine for the natural valine in position 9 of MCP1(9-76). The analogs tested have a similar potency in receptor-binding, monocytic chemotaxis, and calcium flux. Corresponding polynucleotide sequences, vectors, host cells and recombinant expression, particularly in Escherichia coli, are also provided.				
IT	188627-69-2DP, 9-76-Monocyte chemoattractant protein-1 (human), analogs 220382-62-7DP, analogs 220382-68-3DP, analogs 220382-73-0DP, analogs				
	RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); PRP (Properties); BIOL (Biological study); PREP (Preparation)				
	(amino acid sequence; analogs of monocyte chemoattractant protein MCP-1)				

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L2 ANSWER 2 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1997:267097 CAPLUS

DN 126:246815

TI Monocyte chemoattractant protein MCP-1 N-terminally truncated analogs bind by MCP-1 receptors without activating them and are useful inflammation inhibitors

IN Lewis, Ian-Clark; Gong, Jiang-Hong

PA Lewis, Ian-Clark, Can.; Gong, Jiang-Hong

SO Can. Pat. Appl., 27 pp.

CODEN: CPXXEB

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2152141	AA	19961220	CA 95-2152141	19950619
AB	N-terminally truncated MCP-1 analogs that function as MCP-1 antagonists are disclosed. The MCP-1 antagonist analogs may be used to inhibit MCP-1 activity and binding of MCP-1 to MCP-1 receptors. The analogs may be used in pharmaceutical preps. as anti-inflammatory agents. In particular, 8-76- and 9-76-MCP-1 analogs are included.				
IT	188627-69-2 188627-71-6				
	RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)				
	(amino acid sequence; monocyte chemoattractant protein MCP-1 N-terminally truncated analogs bind by MCP-1 receptors without activating them and are useful inflammation inhibitors)				

L2 ANSWER 3 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1997:144129 CAPLUS

DN 126:210456

TI Induction of monocyte chemoattractant protein-1 in the small veins of the ischemic and reperfused canine myocardium

AU Kumar, Ajith G.; Ballantyne, Christie M.; Michael, Lloyd H.; Kukiela, Gilbert L.; Youker, Keith A.; Lindsey, Merry L.; Hawkins, Hal K.; Birdsall, Holly H.; Mackay, Charles R.; et al.

CS Section of Cardiovascular Sciences, DeBakey Heart Center, Department of Medicine, Methodist Hospital, Houston, TX, USA

SO Circulation (1997), 95(3), 693-700

CODEN: CIRCAZ; ISSN: 0009-7322

PB American Heart Association

DT Journal

LA English

AB Healing after myocardial infarction is characterized by the presence of macrophages in the infarcted area. Since augmented monocyte influx has been implicated as a potential mechanism for improved

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healing after reperfusion, the authors wished to study the induction of monocyte chemoattractant protein-1 (MCP-1) during reperfusion. The cDNA for MCP-1 was cloned from a canine jugular vein endothelial cell (CJVEC) library and exhibited 78% identity with the deduced amino acid sequence of human MCP-1. Samples of myocardium were taken from control and ischemic segments after 1 h of ischemia and various times of reperfusion; total RNA was isolated from myocardial samples and probed with a cDNA probe for canine MCP-1. Induction of MCP-1 mRNA occurred only in previously ischemic segments within the first hour of reperfusion, peaked at 3 h, and persisted throughout the first 2 days of reperfusion. In the absence of reperfusion, no significant MCP-1 induction was seen. Both ischemic (but not preischemic) cardiac lymph and human recombinant TNF-.alpha. induced MCP-1 in CJVECs. MCP-1 was identified by immunostaining on infiltrating cells and venular (but not arterial) endothelium by 3 h. In contrast, in situ hybridization showed MCP-1 mRNA to be confined to the endothelium of small veins (venules) 10 to 70 .mu.m in diam. MCP-1 mRNA is induced in the endothelium of a specific class of small veins immediately after reperfusion. MCP-1 induction is confined to the previously ischemic area that has been reperfused. The authors suggest a significant role for MCP-1 in monocyte trafficking in the reperfused myocardium.

IT 188044-57-7

RL: PRP (Properties)

(amino acid sequence; monocyte chemoattractant protein-1 cDNA sequence and induction in small veins of ischemic and reperfused canine myocardium in relation to monocyte influx in wound healing after myocardial infarction)

L2 ANSWER 4 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1996:141358 CAPLUS

DN 124:290261

TI The total chemical synthesis of monocyte chemotactic protein-1 (MCP-1)

AU Brown, Angus R.; Covington, Maryanne; Newton, Robert C.; Ramage, Robert; Welch, Patricia

CS Dep. Chemistry, Univ. Edinburgh, Edinburgh, UK

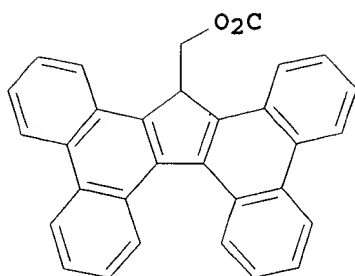
SO J. Pept. Sci. (1996), 2(1), 40-6

CODEN: JPSIEI; ISSN: 1075-2617

DT Journal

LA English

GI



I

AB The affinity-based N.alpha.-amino protecting group tetra benzo[a,c,g,i]fluorenyl-17-methoxycarbonyl (Tbfmoc) (I) has been utilized as a hydrophobic probe to allow the simple, quick and highly effective isolation of a 76 residue cysteine-contg. protein (MCP-1). The base-labile Tbfmoc group can be removed under very mild conditions, which preserve the thiol-contg. protein in the reduced state. Oxidative folding was then used to furnish the biol. active .beta.-chemokine MCP-1.

IT 175644-97-0P, Lymphokine MCP 1 (human)

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) ((tetra benzofluorenyl) methoxycarbonyl protective group in solid-phase prepn. of monocyte chemotactic protein-1)

L2 ANSWER 5 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1995:559968 CAPLUS

DN 122:282234

TI Remedy for wound

IN Matsushima, Koji; Naruto, Masanobu

PA Toray Industries, Inc., Japan

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9507710	A1	19950323	WO 94-JP1512	19940913
	W: CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 07082169	A2	19950328	JP 93-227385	19930913
	CA 2149323	AA	19950323	CA 94-2149323	19940913
	EP 669134	A1	19950830	EP 94-926392	19940913
	R: DE, FR, GB, IT				
	US 5646117	A	19970708	US 95-433519	19950712
	Searcher : Shears 308-4994				

PRAI JP 93-227385 19930913
 WO 94-JP1512 19940913

AB A remedy for wound healing is different from growth factors and growth factor-inducing proteins in property and effect and has a potent therapeutic effect. It contains as the active ingredient a monocyte chemotactic factor or monocyte chemotactic variant or deriv. thereof.

IT 124147-31-5, Lymphokine MCP 1 (human protein moiety reduced)
 RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (monocyte chemoattractant protein-1 as remedy for wound healing)

L2 ANSWER 6 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1995:557253 CAPLUS

DN 123:984

TI Use of heparanase to identify and isolate anti-heparanase compound

IN Hoogwerf, Arlene J.; Ledbetter, Steven R.

PA Upjohn Co., USA

SO PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9504158	A1	19950209	WO 94-US8207	19940726
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
	RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9473689	A1	19950228	AU 94-73689	19940726
	EP 708838	A1	19960501	EP 94-922654	19940726
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 09504422	T2	19970506	JP 94-505884	19940726
PRAI	US 93-99866		19930729		
	US 93-136117		19931013		
	WO 94-US8207		19940726		

AB Purified heparanase having activity of greater than 20 units/.mu.g protein, preferably greater than 50 units heparanase activity per .mu.g protein, is described. The use of heparanase for screening for anti-heparanase compds. is also described. In addn., the use of the high potency heparanase to accelerate wound healing or its use as an immobilized heparanase filter connected to extracorporeal devices to degrade heparin and neutralize its anticoagulant properties during surgery is disclosed.

Searcher : Shears 308-4994

IT 163548-47-8

RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(heparanase filter connection to extracorporeal device to degrade heparin and neutralize anticoagulation during surgery)

L2 ANSWER 7 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1995:12116 CAPLUS

DN 122:26110

TI The PCR, cloning, and sequencing of human monocyte chemoattractant protein-1 (MCP-1) gene

AU Ye, Qinong; Su, Guofu; Yuan, Yi; Huang, Cuifan

CS Inst. Biotechnol., Acad. military medical sciences, Beijing, 100850, Peop. Rep. China

SO Zhonghua Weishengwuxue He Mianyixue Zazhi (1994), 14(1), 29-32
CODEN: ZWMZDP; ISSN: 0254-5101

DT Journal

LA Chinese

AB The peripheral blood mononuclear cells (PBMCs, including monocytes and lymphocytes) from a healthy man were stimulated by PHA. The total RNA was isolated from monocytes, and used in a reverse transcription reaction to synthesize a first strand cDNA which was used as a template in PCR. The cDNA encoding MCP-1 was obtained by PCR and digested with EcoRI and BamHI. The 280 bp DNA fragment encoding MCP-1 was recovered from agarose gel, and then inserted into the pUC19 plasmid digested with EcoRI and BamHI. The DNA fragment was sequenced. The results indicated that the encoding sequence of the twelfth amino acid was different from that reported abroad. TGT was replaced by TGC in the authors expt., but they encoded the same amino acid, namely cysteine. The other encoding sequences were identical to those reported previously. This suggests that the genotype of MCP-1 may be polymorphous.

IT 124147-31-5, Lymphokine MCP 1 (human protein moiety reduced)
RL: PRP (Properties)

(amino acid sequence; PCR, cloning, and sequence of human monocyte chemoattractant protein-1 (MCP-1) cDNA)

L2 ANSWER 8 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1994:131889 CAPLUS

DN 120:131889

TI The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo

AU Li, Yi Shuan; Shyy, Yeun Jund; Wright, James G.; Valente, Anthony J.; Cornhill, J. Fredrick; Kolattukudy, P. E.

CS Ohio State Biotechnol. Cent., Ohio State Univ., Columbus, OH, 43210, USA

SO Mol. Cell. Biochem. (1993), 126(1), 61-8
CODEN: MCBIB8; ISSN: 0300-8177

DT Journal

Searcher : Shears 308-4994

LA English

AB A monocyte chemotactic protein (MCP-1) is thought to play a major role in recruiting monocytes to the vascular endothelium where the adherence of monocytes is one of the earliest events in atherogenesis. The authors cloned MCP-1 cDNA from a .lambda.gt11 cDNA library constructed from human aortic endothelial mRNA to test whether MCP-1 expressed in arterial endothelium is identical to those from other sources. A .apprx.670 MCP-1 cDNA clone was identified and showed the identical sequence with the ones from other cell lines. Northern blot anal. using this cloned MCP-1 cDNA as probe revealed two hybridizing bands of RNA at 0.68 and 0.77 kb in human aortic, human pulmonary arterial, and human umbilical vein endothelial cell cultures. Primer extension anal. showed that the difference in size (.apprx.90 bp) between the two transcripts is not due to a difference at the 5'-noncoding region. The amt. of MCP-1 transcripts increased dramatically in aortic endothelial cells when stimulated with recombinant IL-1.alpha. (100 units/mL), IL-1.beta. (100 units/mL), or TNF-.alpha. (200 ng/mL). Northern blot and slot blot anal. of RNA isolated from both the endothelium and the underlying vessel wall of freshly removed human arteries and veins showed MCP-1 transcripts. This observation demonstrates for the first time that MCP-1 is expressed not only in atherosclerotic human arteries but also in symptom free arteries and veins in vivo.

IT 124147-40-6, Monocyte chemotactic protein (human aortic endothelium MCP-1)

RL: PRP (Properties)

(amino acid sequence of)

L2 ANSWER 9 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1993:488360 CAPLUS

DN 119:88360

TI Cloning and expression of cDNA for human JE cytokine for recombinant manufacture of the JE cytokine

IN Rollins, Barrett; Stiles, Charles; Wong, Gordon G.

PA Genetics Institute, Inc., USA; Dana Farber Cancer Institute

SO U.S., 7 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 5212073	A	19930518	US 89-351008	19890512
	US 5179078	A	19930112	US 91-701515	19910516
	US 5278287	A	19940111	US 93-46243	19930413
PRAI	US 89-351008		19890512		

AB The cDNA for human macrophage inflammatory protein 1-related cytokine JE (I) and its expression in bacterial or mammalian cells are claimed. I is useful for stimulating immune responsiveness and

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wound healing. The cDNA for I was cloned from a human fibroblast cell line WI-38 cDNA library. The cDNA encodes a 99-residue protein, the 1st 29 amino acids of which have the characteristics of a signal peptide. COS cells contg. expression plasmid PMX-JE produced a heterogeneous mixt. of I with mol. wt. 15,000 to 18,000.

IT 124147-40-6, Lymphokine MCP 1 (human precursor protein moiety reduced)

RL: BIOL (Biological study)

(amino acid sequence of and expression in COS cells of cDNA for)

L2 ANSWER 10 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1993:122995 CAPLUS

DN 118:122995

TI Manufacture of a monocyte chemotactic factor by expression of the cloned gene

IN Yamagishi, Junichi; Matsuo, Noriyuki; Fukui, Toshikazu; Yamada, Masaaki

PA Dainippon Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9219737	A1	19921112	WO 92-JP550	19920427
	W: CA, KR, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
	JP 05260987	A2	19931012	JP 92-136213	19920428
	CN 1066470	A	19921125	CN 92-103461	19920509

PRAI JP 91-135950 19910509

AB Monocyte chemotactic factor is manufd. by expression of a cloned cDNA in Escherichia coli where it accumulates as inclusion bodies. A cDNA for monocyte chemotactic factor was placed under control of the trp operon promoter and introduced into E. coli where expression was induced in a complete medium with 3-indole acrylic acid. The protein was recovered from lysates as inclusion bodies making up .gtoreq.20% of the insol. protein of the cells. The initiator Met of these proteins was only rarely removed.

IT 124147-40-6, Lymphokine MCP 1 (human precursor protein moiety reduced)

RL: PRP (Properties)

(amino acid sequence of, complete, and expression in Escherichia coli of cDNA for)

IT 124147-31-5DP, Lymphokine MCP 1 (human protein moiety reduced), N-terminal deletion analogs 124147-31-5P, Lymphokine MCP 1 (human protein moiety reduced) 146413-96-9P

RL: PREP (Preparation)

(manuf. in Escherichia coli of)

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L2 ANSWER 11 OF 18 CAPLUS COPYRIGHT 1999 ACS
 AN 1991:576698 CAPLUS
 DN 115:176698
 TI cDNA cloning and expression of genes for alleles and analogs of
 monocyte chemotactic factor
 IN Furutani, Yasuji; Fukui, Toshikazu; Junichi, Yamagishi; Masaaki,
 Yamada; Matsushima, Kouji; Oppenheim, Joost
 PA United States Dept. of Commerce, USA
 SO PCT Int. Appl., 27 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9007863	A1	19900726	WO 90-US40	19900102
	W: AU, ES, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
	JP 03187380	A2	19910815	JP 89-65	19890101
	JP 02207788	A2	19900817	JP 89-26438	19890203
	CA 2006969	AA	19900701	CA 90-2006969	19900102
	AU 9048450	A1	19900813	AU 90-48450	19900102
	AU 642399	B2	19931021		
	EP 452391	A1	19911023	EP 90-901711	19900102
	EP 452391	B1	19970716		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
	JP 04501961	T2	19920409	JP 90-502276	19900102
	ES 2056753	A6	19941001	ES 90-50005	19900102
	AT 155526	E	19970815	AT 90-901711	19900102
	ES 2104600	T3	19971016	ES 90-901711	19900102
PRAI	JP 89-65		19890101		
	JP 89-26438		19890203		
	JP 89-126438		19890203		
	WO 90-US40		19900102		

AB CDNAs for allelic forms of human monocyte chemotactic factor (MCF)
 are cloned and expressed in Escherichia coli. The cDNA was cloned
 from a cDNA bank from a human promyelocytic leukemia cell line HL-60
 using amino acid sequence-derived probes. Two alleles with a change
 at one amino acid residue were found. The cDNAs for the precursor
 and several forms of the protein with residues removed from the
 amino terminal region that had not lost MCF activity are manufd. and
 expressed in E. coli from the trp promoter.

IT 124147-31-5, Lymphokine MCP 1 (human protein moiety reduced)
 124147-40-6, Lymphokine MCP 1 (human precursor protein
 moiety reduced) 132023-87-1, 7-76-Lymphokine MCP 1 (human
 protein moiety reduced) 132023-88-2, 4-76-Lymphokine MCP 1
 (human protein moiety reduced) 132083-92-2,
 11-76-Lymphokine MCP 1 (human protein moiety reduced)

Searcher : Shears 308-4994

RL: BIOL (Biological study); PRP (Properties)
 (amino acid sequence of and cloning and expression in Escherichia coli of cDNA for)

IT 124147-31-5D, Lymphokine MCP 1 (human protein moiety reduced), amino-terminal 1-10 amino acids deletion derivs.

RL: PRP (Properties)
 (gene for, expression in Escherichia coli of)

L2 ANSWER 12 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1991:21643 CAPLUS

DN 114:21643

TI A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic and activating factor (MCP-1/MCAF)

AU Bottazzi, Barbara; Colotta, Francesco; Sica, Antonio; Nobili, Nadia; Mantovani, Alberto

CS Ist. Ric. Farmacol. Mario Negri, Milan, 20157, Italy

SO Int. J. Cancer (1990), 45(4), 795-7

CODEN: IJCNAW; ISSN: 0020-7136

DT Journal

LA English

AB The complete nucleotide sequence and deduced amino acid sequence for TDCF cDNA from the prototypic TDCF-producing human 8387 sarcoma cell line were obtained. Comparison of the nucleotide sequence with that of MCP-1/MCAF disclosed that TDCF and MCP-1/MCAF are identical.

IT 124147-40-6, Lymphokine MCP 1 (human precursor protein moiety reduced)

RL: PRP (Properties)
 (amino acid sequence of)

L2 ANSWER 13 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1990:585693 CAPLUS

DN 113:185693

TI Structure of human monocyte chemotactic protein gene and its regulation by TPA

AU Shyy, Yeun Jund; Li, Yi Shuan; Kolattukudy, P. E.

CS Ohio State Biotechnol. Cent., Ohio State Univ., Columbus, OH, 43210, USA

SO Biochem. Biophys. Res. Commun. (1990), 169(2), 346-51

CODEN: BBRCA9; ISSN: 0006-291X

DT Journal

LA English

AB Monocyte chemotactic protein released by endothelium plays an important role in inflammation, immune reactions, and probably in atherogenesis. To elucidate the regulation of synthesis of this protein, the human gene encoding its synthesis was cloned and its nucleotide sequence was detd. This gene is composed of 3 exons of 145, 118, and 478 bp in length with 2 introns of 800 and 385 bp in length. Phorbol ester responsive elements (TRE) were found 129 and

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157 bp upstream from the translation initiation site and the phorbol ester treatment of endothelial cell cultures elevated the transcript level of this gene.

IT 124147-40-6, Lymphokine MCP 1 (human precursor protein moiety reduced)
RL: PRP (Properties)
(amino acid sequence of)

L2 ANSWER 14 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1990:401553 CAPLUS

DN 113:1553

TI Monocyte-attracting peptides: purification, characterization, and cDNA cloning

IN Yoshimura, T.; Robinson, E. A.; Appella, E.; Leonard, E. J.

PA United States Dept. of Health and Human Services, USA

SO U. S. Pat. Appl., 67 pp. Avail. NTIS Order No. PAT-APPL-6-330 446.

CODEN: XAXXAV

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 330446	A0	19890715	US 89-330446	19890330
	CA 2006964	AA	19900731	CA 90-2006964	19900102
	WO 9008777	A1	19900809	WO 90-US39	19900102
	W: AU, ES, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
	AU 9050480	A1	19900824	AU 90-50480	19900102
	US 5714578	A	19980203	US 95-466280	19950606
PRAI	US 89-304234		19890131		
	US 89-330446		19890330		
	WO 90-US39		19900102		

AB Peptides that act as attractants for monocytes are isolated and characterized from a human glioma cell line and human peripheral blood leukocytes and cDNA for the glioma attractants cloned. The peptides are useful in the treatment of infection and inflammatory disease and as neoplasm inhibitors. Purifn. of the protein was by dye-affinity chromatog. and HPLC and cDNA cloning was by std. methods using amino acid sequence-derived probes. Dose-response curves showed an optimal attractant concn. of 10-9M.

IT 124147-31-5, Lymphokine MCP 1 (human protein moiety reduced)
RL: PRP (Properties)
(amino acid sequence of)

IT 124147-40-6, Lymphokine MCP 1 (human precursor protein moiety reduced)
RL: PRP (Properties)
(amino acid sequence of and cloning in Escherichia coli of cDNA for)

L2 ANSWER 15 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1990:176677 CAPLUS

DN 112:176677

TI Complete amino acid sequence of a human monocyte chemoattractant, a putative mediator of cellular immune reactions

AU Robinson, Elizabeth A.; Yoshimura, Teizo; Leonard, Edward J.; Tanaka, Shuji; Griffin, Patrick R.; Shabanowitz, Jeffrey; Hunt, Donald F.; Appella, Ettore

CS Lab. Cell Biol., Natl. Cancer Inst., Bethesda, MD, 20892, USA

SO Proc. Natl. Acad. Sci. U. S. A. (1989), 86(6), 1850-4

CODEN: PNASA6; ISSN: 0027-8424

DT Journal

LA English

AB In a study of the structural basis for leukocyte specificity of chemoattractants, the complete amino acid sequence of human glioma-derived monocyte chemotactic factor (GDCF-2), a peptide that attracts human monocytes but not neutrophils, was detd. The choice of a tumor cell product for anal. was dictated by its relative abundance and an amino acid compn. indistinguishable from that of lymphocyte-derived chemotactic factor (LDCF), the agonist thought to account for monocyte accumulation in cellular immune reactions. By a combination of Edman degrdn. and mass spectrometry, it was established that GDCF-2 comprises 76 amino acid residues, commencing at the N terminus with pyroglutamic acid. The peptide contains 4 half-cystines, at positions 11, 12, 36, and 52, which create a pair of loops, clustered at the disulfide bridges. The relative positions of the half-cystines are almost identical to those of monocyte-derived neutrophil chemotactic factor (MDNCF), a peptide of similar mass but with only 24% sequence identity to GDCF. Thus, GDCF and MDNCF have a similar gross secondary structure because of the loops formed by the clustered disulfides, and their different leukocyte specificities are most likely detd. by the large differences in primary sequence.

IT 126463-99-8, Lymphokine MCP 1 (human U-I05MG cell protein moiety) 126545-73-1, Lymphokine MCP 1 (human U-I05MG cell protein moiety reduced)

RL: PRP (Properties)

(amino acid sequence of)

L2 ANSWER 16 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1990:71309 CAPLUS

DN 112:71309

TI The human homolog of the JE gene encodes a monocyte secretory protein

AU Rollins, Barrett J.; Stier, Peter; Ernst, Timothy; Wong, Gordon G.

CS Dana-Farber Cancer Inst., Harvard Med. Sch., Boston, MA, 02115, USA

SO Mol. Cell. Biol. (1989), 9(11), 4687-95

CODEN: MCEBD4; ISSN: 0270-7306

DT Journal

Searcher : Shears 308-4994

LA English

AB The mouse fibroblast gene, JE, was one of the first platelet-derived growth factor-inducible genes to be described as such. The protein encoded by JE (mJE) is the prototype of a large family of secreted, cytokinelike glycoproteins, all of whose members are induced by a mitogenic or activation signal in monocytes, macrophages, and T lymphocytes; JE is the only member to have been identified in fibroblasts. The identification of a human homolog for murine JE, cloned from human fibroblasts, is reported here. The protein predicted by the coding sequence of human JE (hJE) is 55 amino acids shorter than mJE, and its sequence is identical to that of a purified monocyte chemoattractant. When expressed in COS cells, the human JE cDNA directed the secretion of N-glycosylated proteins of Mr 16,000 to 18,000 as well as proteins of Mr 15,500, 15,000, and 13,000. Antibodies raised against mJE recognized these hJE species, all of which were secreted by human fibroblasts. The hJE expression was stimulated in HL60 cells during phorbol myristate acetate-induced monocytoid differentiation. However, resting human monocytes constitutively secreted hJE; treatment with gamma interferon did not enhance hJE expression in monocytes, and treatment with phorbol myristate acetate or lipopolysaccharide inhibited its expression. Thus, human JE encodes yet another member of the large family of JE-related cytokinelike proteins, in this case a novel human monocyte and fibroblast secretory protein.

IT 124147-31-5, Lymphokine MCP 1 (human protein moiety reduced)
124147-40-6, Lymphokine MCP 1 (human precursor protein moiety reduced)

RL: PRP (Properties)
(amino acid sequence of)

L2 ANSWER 17 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1990:17070 CAPLUS

DN 112:17070

TI Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE

AU Yoshimura, Teizo; Yuhki, Naoya; Moore, Stephen K.; Appella, Ettore; Lerman, Michael I.; Leonard, Edward J.

CS Lab. Immunobiol., Natl. Cancer Inst., Frederick, MD, 21701, USA

SO FEBS Lett. (1989), 244(2), 487-93

CODEN: FEBLAL; ISSN: 0014-5793

DT Journal

LA English

AB A cDNA encoding human monocyte chemoattractant protein-1 (MCP-1), previously isolated from glioma cell line culture fluid, was analyzed. Screening of a cDNA library from total poly(A) RNA of glioma cell line U-105MG yielded a clone that coded for the entire MCP-1. Nucleotide sequence anal. and comparison with the amino acid sequence of purified MCP-1 showed that the cDNA clone comprises a

Searcher : Shears 308-4994

53-nucleotide 5'-non-coding region, an open reading frame coding for a 99-residue protein of which the last 76 residues correspond exactly to pure MCP-1, and a 389-nucleotide 3'-untranslated region. The hydrophobicity of the first 23 residues is typical of a signal peptide. Southern blot anal. of human and animal genomic DNA showed that there is a single MCP-1 gene, which is conserved in several primates. MCP-1 mRNA was induced in human peripheral blood mononuclear leukocytes by PHA, LPS, and IL-1, but not by IL-2, TNF, or IFN- γ . Among proteins with similar sequences, the coding regions of MCP-1 and mouse JE show 68% identity. This suggests that MCP-1 is the human homolog of the mouse competence gene JE.

IT 124147-31-5, Lymphokine MCP 1 (human protein moiety reduced)

124147-40-6, Lymphokine MCP 1 (human precursor protein moiety reduced)

RL: PRP (Properties)

(amino acid sequence of)

L2 ANSWER 18 OF 18 CAPLUS COPYRIGHT 1999 ACS

AN 1990:17058 CAPLUS

DN 112:17058

TI Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF)

AU Furutani, Yasuji; Nomura, Hideki; Notake, Mitsue; Oyamada, Yoshihiro; Fukui, Toshikazu; Yamada, Masaaki; Larsen, Christian G.; Oppenheim, Joost J.; Matsushima, Koji

CS Res. Lab., Dainippon Pharm. Co. Ltd., Suita, 564, Japan

SO Biochem. Biophys. Res. Commun. (1989), 159(1), 249-55

CODEN: BBRCA9; ISSN: 0006-291X

DT Journal

LA English

AB Some cDNA clones having a nucleotide sequence encoding a human monocyte chemotactic and activating factor (MCAF) were isolated and sequenced. The amino acid sequence deduced from the nucleotide sequence reveals the primary structure of the MCAF precursor to be composed of a putative signal peptide sequence of 23 amino acid residues and a mature MCAF sequence of 76 amino acid residues. The amino acid sequence of MCAF showed 25-55% homol. with other members of an inducible cytokine family, including macrophage inflammatory protein and some putative polypeptide mediators known as JE, LD78 RANmTES, and TCA-3. This suggests that MCAF is a member of family of factors involved in immune and inflammatory responses.

IT 124147-31-5, Lymphokine MCP 1 (human protein moiety reduced)

124147-40-6, Lymphokine MCP 1 (human precursor protein moiety reduced)

RL: PRP (Properties)

(amino acid sequence of)

E23 THROUGH E38 ASSIGNED

08/927939

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L3 16 SEA FILE=REGISTRY ABB=ON PLU=ON (124147-31-5/BI OR
124147-40-6/BI OR 188627-69-2/BI OR 126463-99-8/BI OR
126545-73-1/BI OR 132023-87-1/BI OR 132023-88-2/BI OR
132083-92-2/BI OR 146413-96-9/BI OR 163548-47-8/BI OR
175644-97-0/BI OR 188044-57-7/BI OR 188627-71-6/BI OR
220382-62-7/BI OR 220382-68-3/BI OR 220382-73-0/BI)

=> s l3 and l1

L4 16 L3 AND L1

=> d 1-16 .bevreg2

L4 ANSWER 1 OF 16 REGISTRY COPYRIGHT 1999 ACS
RN 220382-73-0 REGISTRY
CN 9-76-Monocyte chemoattractant protein-1 [9-threonine] (human) (9CI)
(CA INDEX NAME)
CI MAN
SQL 68

SEQ 1 TTCCYNFTNR KISVQRLASY RRITSSKCPK EAVIFKTIVA KEICADPKQK
=====

51 WVQDSMDHLD KQTQTPKT
===

HITS AT: 42-53

REFERENCE 1: 130:167179

L4 ANSWER 2 OF 16 REGISTRY COPYRIGHT 1999 ACS
RN 220382-68-3 REGISTRY
CN 9-76-Monocyte chemoattractant protein-1 [9-alanine] (human) (9CI)
(CA INDEX NAME)

Searcher : Shears 308-4994

08/927939

CI MAN
SQL 68

SEQ 1 ATCCYNFTNR KISVQRLASY RRITSSKCPK EAVIFKTIVA KEICADPKQK
=====

51 WVQDSMDHLD KQTQTPKT

===

HITS AT: 42-53

REFERENCE 1: 130:167179

L4 ANSWER 3 OF 16 REGISTRY COPYRIGHT 1999 ACS
RN 220382-62-7 REGISTRY
CN 9-76-Monocyte chemoattractant protein-1 [9-glycine] (human) (9CI)
(CA INDEX NAME)

CI MAN
SQL 68

SEQ 1 GTCCYNFTNR KISVQRLASY RRITSSKCPK EAVIFKTIVA KEICADPKQK
=====

51 WVQDSMDHLD KQTQTPKT

===

HITS AT: 42-53

REFERENCE 1: 130:167179

L4 ANSWER 4 OF 16 REGISTRY COPYRIGHT 1999 ACS
RN 188627-71-6 REGISTRY
CN 8-76-Monocyte chemoattractant protein-1 (human) (9CI) (CA INDEX
NAME)

CI MAN
SQL 69

SEQ 1 PVTCCYNFTN RKISVQRLAS YRRITSSKCP KEAVIFKTIV AKEICADPKQ
=====

51 KWVQDSMDHL DKQTQTPKT

====

HITS AT: 43-54

REFERENCE 1: 126:246815

L4 ANSWER 5 OF 16 REGISTRY COPYRIGHT 1999 ACS
RN 188627-69-2 REGISTRY
CN 9-76-Monocyte chemoattractant protein-1 (human) (9CI) (CA INDEX
NAME)

CI MAN
SQL 68

SEQ 1 VTCCYNFTNR KISVQRLASY RRITSSKCPK EAVIFKTIVA KEICADPKQK
Searcher : Shears 308-4994

08/927939

=====

51 WVQDSMDHLD KQTQTPKT

===

HITS AT: 42-53

REFERENCE 1: 130:167179

REFERENCE 2: 126:246815

L4 ANSWER 6 OF 16 REGISTRY COPYRIGHT 1999 ACS

RN 188044-57-7 REGISTRY

CN Monocyte chemoattractant protein-1 (Canis familiaris) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank U29653-derived protein GI 1144186

CN Monocyte chemoattractant protein-1 (dog)

CI MAN

SQL 101

SEQ 1 MKVSAALLCL LLIAAALTQ VLTQPDAAIS PVTCCYTLTN KKISIQRLAS

51 YKRVTSKCP KEAVIFKTVL NKEICADPKQ KVVQDSMAHL DKKSQTQTAK

=====

101 P

HITS AT: 73-84

REFERENCE 1: 126:210456

L4 ANSWER 7 OF 16 REGISTRY COPYRIGHT 1999 ACS

RN 175644-97-0 REGISTRY

CN Lymphokine MCP 1 (human) (9CI) (CA INDEX NAME)

CI MAN

SQL 76

SEQ 1 QPDAINAPVT CCYNFTNRKI SVQRLASYRR ITSSKCPKEA VIFKTIVAKE

=

51 ICADPKQKWV QDSMDHLDKQ TQTPKT

=====

HITS AT: 50-61

REFERENCE 1: 124:290261

L4 ANSWER 8 OF 16 REGISTRY COPYRIGHT 1999 ACS

RN 163548-47-8 REGISTRY

CN Lymphokine MCP-1 (human monocyte chemoattractant 1 fragment) (9CI) (CA INDEX NAME)

CI MAN

SQL 99

SEQ 1 MKVSAALLCL LLIAATFIPQ GKAQPDAINA PVTCCYNFTN RKISVQRLAS

Searcher : Shears 308-4994

08/927939

51 YRRITSSKCP KEAVIFKTIV AKEICADPKQ KVVQDSMDHL DKQTQTPKT

=====

HITS AT: 73-84

REFERENCE 1: 123:984

L4 ANSWER 9 OF 16 REGISTRY COPYRIGHT 1999 ACS

RN 146413-96-9 REGISTRY

CN Lymphokine MCP 1 (human protein moiety reduced), N-L-methionyl-
(9CI) (CA INDEX NAME)

CI MAN

SQL 77

SEQ 1 MQPDAINAPV TCCYNFTNRK ISVQRLASYR RITSSKCPKE AVIFKTIVAK

51 EICADPKQKW VQDSMDHLDK QTQTPKT

=====

HITS AT: 51-62

REFERENCE 1: 118:122995

L4 ANSWER 10 OF 16 REGISTRY COPYRIGHT 1999 ACS

RN 132083-92-2 REGISTRY

CN 11-76-Lymphokine MCP 1 (human protein moiety reduced) (9CI) (CA
INDEX NAME)

CI MAN

SQL 66

SEQ 1 CCYNFTNRKI SVQRLASYRR ITSSKCPKEA VIFKTIVAKE ICADPKQKWV

= =====

51 QDSMDHLDKQ TQTPKT

=

HITS AT: 40-51

REFERENCE 1: 115:176698

L4 ANSWER 11 OF 16 REGISTRY COPYRIGHT 1999 ACS

RN 132023-88-2 REGISTRY

CN 4-76-Lymphokine MCP 1 (human protein moiety reduced) (9CI) (CA
INDEX NAME)

CI MAN

SQL 73

SEQ 1 AINAPVTCCY NFTNRKISVQ RLASYRRITS SKCPKEAVIF KTIVAKEICA

=====

51 DPKQKWQDS MDHLDKQTQT PKT

=====

HITS AT: 47-58

REFERENCE 1: 115:176698

Searcher : Shears 308-4994

08/927939

L4 ANSWER 12 OF 16 REGISTRY COPYRIGHT 1999 ACS
RN 132023-87-1 REGISTRY
CN 7-76-Lymphokine MCP 1 (human protein moiety reduced) (9CI) (CA
INDEX NAME)
CI MAN
SQL 70

SEQ 1 APVTCCYNFT NRKISVQRLA SYRRITSSKC PKEAVIFKTI VAKEICADPK
=====

51 QKWVQDSMDH LDKQTQTPKT
=====

HITS AT: 44-55

REFERENCE 1: 115:176698

L4 ANSWER 13 OF 16 REGISTRY COPYRIGHT 1999 ACS
RN 126545-73-1 REGISTRY
CN Lymphokine MCP 1 (human U-I05MG cell protein moiety reduced) (9CI)
(CA INDEX NAME)
CI MAN
SQL 76

SEQ 1 XPDAINAPVT CCYNFTNRKI SVQRLASYRR ITSSKCPKEA VIFKTIVAKE
=

51 ICADPKQKWV QDSMDHLDKQ TQTPKT
===== =

HITS AT: 50-61

REFERENCE 1: 112:176677

L4 ANSWER 14 OF 16 REGISTRY COPYRIGHT 1999 ACS
RN 126463-99-8 REGISTRY
CN Lymphokine MCP 1 (human U-I05MG cell protein moiety) (9CI) (CA
INDEX NAME)
CI MAN
SQL 76

SEQ 1 XPDAINAPVT CCYNFTNRKI SVQRLASYRR ITSSKCPKEA VIFKTIVAKE
=

51 ICADPKQKWV QDSMDHLDKQ TQTPKT
===== =

HITS AT: 50-61

REFERENCE 1: 112:176677

L4 ANSWER 15 OF 16 REGISTRY COPYRIGHT 1999 ACS
RN 124147-40-6 REGISTRY
CN Lymphokine MCP 1 (human precursor protein moiety reduced) (9CI) (CA
Searcher : Shears 308-4994

08/927939

INDEX NAME)

OTHER NAMES:

CN Monocyte chemotactic protein (human aortic endothelium MCP-1)

CI MAN

SQL 99

SEQ 1 MKVSAALLCL LLIAATFIPQ GLAQPDAINA PVTCCYNFTN RKISVQRLAS
51 YRRITSSKCP KEAVIFKTIV AKEICADPKQ KVVQDSMDHL DKQTQTPKT

=====

HITS AT: 73-84

REFERENCE 1: 120:131889

REFERENCE 2: 119:88360

REFERENCE 3: 118:122995

REFERENCE 4: 115:176698

REFERENCE 5: 114:21643

REFERENCE 6: 113:185693

REFERENCE 7: 113:1553

REFERENCE 8: 112:71309

REFERENCE 9: 112:17070

REFERENCE 10: 112:17058

L4 ANSWER 16 OF 16 REGISTRY COPYRIGHT 1999 ACS

RN 124147-31-5 REGISTRY

CN Lymphokine MCP 1 (human protein moiety reduced) (9CI) (CA INDEX
NAME)

OTHER NAMES:

CN Lymphokine MCP 1 (human clone pMC(01-04) reduced)

CI MAN

SQL 76

SEQ 1 QPDAINAPVT CCYNFTNRKI SVQRLASYRR ITSSKCPKEA VIFKTIVAKE
51 ICADPKQKWV QDSMDHLDKQ TQTPKT

=====

HITS AT: 50-61

REFERENCE 1: 122:282234

REFERENCE 2: 122:26110

Searcher : Shears 308-4994

08/927939

REFERENCE 3: 118:122995

REFERENCE 4: 115:176698

REFERENCE 5: 113:1553

REFERENCE 6: 112:71309

REFERENCE 7: 112:17070

REFERENCE 8: 112:17058

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Searcher : Shears 308-4994

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WIP protein - protein database search, using Smith-Waterman algorithm

Run on: Tue Mar 30 17:40:00 1999; Maspar time 2.89 Seconds
Tabular output not generated. 67.259 Million cell updates/sec

Description: >US-08-927-939-1
Perfect Score: (1-12) from US08927939.pep
Sequence: 1 EICADPKQKWQ 12

Scoring table: PAM 150
Gap 15

Searched: 131922 seqs, 16180660 residues

Post-processing: Minimum Match 0%
Listing first 45 summaries

Database: a-geneseq32
1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7
8:part8 9:part9 10:part10 11:part11 12:part12 13:part13
14:part14 15:part15 16:part16 17:part17 18:part18
19:part19 20:part20 21:part21 22:part22 23:part23
24:part24 25:part25 26:part26 27:part27 28:part28
29:part29

Statistics: Mean 18.390; Variance 63.736; scale 0.289

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description	Pred. No.
1	97	100.0	66	24	Monocyte chemoattract	4.79e-03
2	97	100.0	67	24	Monocyte chemoattract	4.79e-03
3	97	100.0	68	24	Monocyte chemoattract	4.79e-03
4	97	100.0	69	14	des(2-8) MCP-1.	4.79e-03
5	97	100.0	69	24	Monocyte chemoattract	4.79e-03
6	97	100.0	76	15	Monocyte chemoattract	4.79e-03
7	97	100.0	76	21	Mature human monocyte	4.79e-03
8	97	100.0	76	5	MCF.	4.79e-03
9	97	100.0	76	14	Peptide from human g1	4.79e-03
10	97	100.0	76	14	(28-Asp) MCP-1.	4.79e-03
11	97	100.0	76	20	Monocyte chemoattract	4.79e-03
12	97	100.0	76	10	Sense MCP-1.	4.79e-03
13	97	100.0	76	14	(3-Ale) MCP-1.	4.79e-03
14	97	100.0	76	14	(24-Arg) MCP-1.	4.79e-03
15	97	100.0	77	15	Mature MCP-1.	4.79e-03
16	97	100.0	99	5	MCF.	4.79e-03
17	97	100.0	99	2	Human monocyte chemo-	4.79e-03
18	97	100.0	99	13	Chemoattractant prote	4.79e-03

19	97	100.0	99	14	R73914	Human monocyte chemoa	4.79e-03
20	93	95.9	71	27	W22675	Dro13+ chemokine beta	1.28e-02
21	93	95.9	71	27	W22673	Bac 3 chemokine beta1	1.28e-02
22	93	95.9	77	27	W22672	Bac 2 chemokine beta1	1.28e-02
23	93	95.9	79	27	W22674	Dro11/2 chemokine bet	1.28e-02
24	93	95.9	82	27	W22671	Bac 1 chemokine beta1	1.28e-02
25	93	95.9	82	24	W17665	Stem cell mobilising	1.28e-02
26	93	95.9	98	17	R93087	Human chemokine beta-	1.28e-02
27	93	95.9	98	28	W30191	Monocyte chemoattract	1.28e-02
28	93	95.9	98	27	W22670	Human chemokine beta1	1.28e-02
29	93	95.9	99	2	R06398	Human MCF precursor.	1.28e-02
30	92	94.8	76	5	R26580	Sequence of bovine p6	1.63e-02
31	92	94.8	99	5	R26581	Sequence of p6 precu	1.63e-02
32	90	92.8	67	14	R73915	Human monocyte chemoa	2.65e-02
33	90	92.8	99	13	R70801	Chemoattractant prote	2.65e-02
34	90	92.8	109	2	R24353	Cytokine encoded by c	2.65e-02
35	89	91.8	82	29	W4721	Amino acid sequence o	3.38e-02
36	89	91.8	97	23	W10099	Human eotaxin.	3.38e-02
37	89	91.8	97	21	W00667	Pancreas expressed ch	3.38e-02
38	89	91.8	97	24	W14990	Human eosinocyte CC t	3.38e-02
39	84	86.6	73	13	R70252	Eotaxin chemoattracta	1.13e-01
40	84	86.6	96	24	W14991	Guinea pig eosinocyte	1.13e-01
41	82	84.5	72	13	R70804	Chemoattractant MCP-2	1.82e-01
42	82	84.5	109	29	W42072	Human MC proprotein.	1.82e-01
43	82	84.5	109	26	W26555	Human beta-chemokine	1.82e-01
44	81	83.5	89	14	R76127	Macrophage inflammato	2.31e-01
45	81	83.5	395	26	W23347	Novel murine CX3C 395	2.31e-01

ALIGNMENTS

RESULT 1
ID W13598 standard; peptide: 66 AA.
AC W13598;
DT 07-NOV-1997 (first entry)
DE Monocyte chemoattractant protein analogue MCP-1 (10-76).
KW Truncated monocyte chemoattractant protein-1; inhibitor;
KW receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
KW chronic inflammatory disease; arthritis; arteriosclerosis;
KW lung disease.
OS Homo sapiens.
PN CA2152141-A.
PD 20-DEC-1996.
PF 19-JUN-1995; 152141.
PR 19-JUN-1995; CA-152141.
PA (LEWIS) LEWIS I.
PI Gong J, Lewis I;
DR WPI: 97-165844/16.
PT N-terminally truncated monocyte chemoattractant protein-1 (MCP-1) -
PT lacks MCP-1 activity and inhibits receptor binding, useful as
PT anti-inflammatory agent
PS Disclosure; Page 5; 27pp; English.
CC The present sequence represents an analogue, MCP-1 (10-76), of monocyte
CC chemoattractant protein-1 (MCP-1). The analogue, which lacks the
CC N-terminal amino acids 1-9 of MCP-1, acts as an antagonist of MCP-1
CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
CC receptor. The analogue is useful as an anti-inflammatory agent to block
CC the effects of MCP-1 which is an inflammatory mediator causing migration
CC of monocytes and other cells e.g. basophils and lymphocytes into
CC inflammation sites. MCP-1 has been implicated in allergic and chronic
CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
CC diseases. The analogue competes more effectively with MCP-1 for binding
CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
CC providing 50% inhibition of binding at a 25:1 ratio or less, compared
CC with 75:1 for prior art mutant 7ND.
SQ Sequence 66 AA;

Query Match 100.0%; Score 97; DB 24; Length 66;
Best Local Similarity 100.0%; Pred. No. 4.79e-03;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 40 eicadpkqkwq 51
|||||

QY 1 EICADPKQKVVQ 12

RESULT 2

ID W13599 standard; peptide: 67 AA.
 AC W13599;
 DT 07-NOV-1997 (first entry)
 DE Monocyte chemoattractant protein analogue MCP-1 (11-76).
 KW Truncated monocyte chemoattractant protein-1; inhibitor;
 KW receptor binding; anti-inflammatory; basophil; lymphocyte; allergy;
 KW chronic inflammatory disease; arthritis; arteriosclerosis;
 KW lung disease.
 OS Homo sapiens.
 PN CA2152141-A.
 PD 20-DEC-1996.
 PF 19-JUN-1995; 152141.
 F 19-JUN-1995; CA-152141.
 (LEWIS) LEWIS I.
 F4 Gong J, Lewis I;
 WPI: 97-165844/16.
 PT N-terminally truncated monocyte chemoattractant protein-1 (MCP-1) -
 PT lacks MCP-1 activity and inhibits receptor binding, useful as
 PT anti-inflammatory agent
 PS Disclosure: Page 5; 27pp; English.
 CC The present sequence represents an analogue, MCP-1 (11-76), of monocyte
 CC chemoattractant protein-1 (MCP-1). The analogue, which lacks the
 CC N-terminal amino acids 1-10 of MCP-1, acts as an antagonist of MCP-1
 CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
 CC receptor. The analogue is useful as an anti-inflammatory agent to block
 CC the effects of MCP-1 which is an inflammatory mediator causing migration
 CC of monocytes and other cells e.g. basophils and lymphocytes into
 CC inflammatory sites. MCP-1 has been implicated in allergic and chronic
 CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
 CC diseases. The analogue competes more effectively with MCP-1 for binding
 CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
 CC providing 50% inhibition of binding at a 25:1 ratio or less, compared
 CC with 75:1 for prior art mutant 7ND.
 SQ Sequence 67 AA;

Query Match 100.0%; Score 97; DB 24; Length 67;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 41 eicadpkqkvq 52

|||||

1 EICADPKQKVVQ 12

RESULT 3

ID W13597 standard; peptide: 68 AA.
 AC W13597;
 DT 07-NOV-1997 (first entry)
 DE Monocyte chemoattractant protein analogue MCP-1 (9-76).
 KW Truncated monocyte chemoattractant protein-1; inhibitor;
 KW receptor binding; anti-inflammatory; basophil; lymphocyte; allergy;
 KW chronic inflammatory disease; arthritis; arteriosclerosis;
 KW lung disease.
 OS Homo sapiens.
 PN CA2152141-A.
 PD 20-DEC-1996.
 PF 19-JUN-1995; 152141.
 PR 19-JUN-1995; CA-152141.
 PA (LEWIS) LEWIS I.
 PI Gong J, Lewis I;
 WPI: 97-165844/16.
 PT N-terminally truncated monocyte chemoattractant protein-1 (MCP-1) -
 PT lacks MCP-1 activity and inhibits receptor binding, useful as
 PT anti-inflammatory agent
 PS Claim 7; Page 5; 27pp; English.
 CC The present sequence represents an analogue, MCP-1 (9-76), of monocyte
 CC chemoattractant protein-1 (MCP-1). The analogue, which lacks the
 CC N-terminal amino acids 1-8 of MCP-1, acts as an antagonist of MCP-1
 CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1

CC receptor. The analogue is useful as an anti-inflammatory agent to block
 CC the effects of MCP-1 which is an inflammatory mediator causing migration
 CC of monocytes and other cells e.g. basophils and lymphocytes into
 CC inflammation sites. MCP-1 has been implicated in allergic and chronic
 CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
 CC diseases. The analogue competes more effectively with MCP-1 for binding
 CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
 CC providing 50% inhibition of binding at a 25:1 ratio or less, compared
 CC with 75:1 for prior art mutant 7ND.
 SQ Sequence 68 AA;

Query Match 100.0%; Score 97; DB 24; Length 68;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 42 eicadpkqkvq 53

|||||

1 EICADPKQKVVQ 12

RESULT 4

ID R87678 standard; protein: 69 AA.
 AC R87678;
 DT 21-FEB-1996 (first entry)
 DE des(2-8) MCP-1.
 KW monocyte chemoattractant protein; MCP-1; mutant; restenosis;
 KW angioplasty.
 OS Homo sapiens.
 FH Key Location/Qualifiers
 FT modified_site 2..3
 FT /note= "amino acids 2-8 of the native protein have
 FT been deleted between these residues"
 FT disulfide_bond 4..29
 FT disulfide_bond 5..45
 PN W09513295-A1.
 PD 18-MAY-1995.
 PF 07-NOV-1994; U12874.
 PR 12-NOV-1993; US-152301
 PA (DAND) DANA FARBER CANCER INST INC.
 PI Rollins B, Zhang YJ;
 DR WPI: 95-215051/28.
 PT Human monocyte chemoattractant protein-1 (MCP-1) derivs. - are
 PT capable of inhibiting the monocyte chemoattractant activity of
 PT endogenous MCP-1 and can be used to treat restenosis
 PS Claim 4; Page 11; 22pp; English.
 CC Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such
 CC that they inhibit the monocyte chemoattractant activity of endogenous
 CC MCP-1, provided that the derivative has not been modified by the
 CC substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations
 CC are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg
 CC by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino
 CC acids 2-8. The present sequence is a specifically claimed human MCP-1
 CC derivative based on the parent protein disclosed in Rollins, Molecular
 CC and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.
 CC The peptides can be used to prevent restenosis, e.g. in patients
 CC undergoing coronary artery angioplasty.
 SQ Sequence 69 AA;

Query Match 100.0%; Score 97; DB 14; Length 69;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 43 eicadpkqkvq 54

|||||

1 EICADPKQKVVQ 12

RESULT 5

ID W13596 standard; peptide: 69 AA.
 AC W13596;
 DT 07-NOV-1997 (first entry)
 DE Monocyte chemoattractant protein analogue MCP-1 (8-76).
 KW Truncated monocyte chemoattractant protein-1; inhibitor;

KW receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
 KW chronic inflammatory disease; arthritis; arteriosclerosis;
 KW lung disease.
 OS Homo sapiens.
 PN CA2152141-A.
 PD 20-DEC-1996.
 PF 19-JUN-1995; 152141.
 PR 19-JUN-1995; CA-152141.
 PA (LEWIS) LEWIS I.
 PI Gong J, Lewis I;
 DR WPI: 97-165844/16.
 FT N-terminally truncated monocyte chemoattractant protein-1 (MCP-1) -
 PT lacks MCP-1 activity and inhibits receptor binding, useful as
 PT anti-inflammatory agent
 PS Claim 5: Page 5: 27pp; English.
 CC The present sequence represents an analogue, MCP-1 (8-76), of monocyte
 CC chemoattractant protein-1 (MCP-1). The analogue, which lacks the
 CC N-terminal amino acids 1-7 of MCP-1, acts as an antagonist of MCP-1
 CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
 CC receptor. The analogue is useful as an anti-inflammatory agent to block
 CC the effects of MCP-1 which is an inflammatory mediator causing migration
 CC of monocytes and other cells e.g. basophils and lymphocytes into
 CC inflammation sites. MCP-1 has been implicated in allergic and chronic
 CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
 CC diseases. The analogue competes more effectively with MCP-1 for binding
 CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
 CC providing 50% inhibition of binding at a 25:1 ratio or less, compared
 CC with 75:1 for prior art mutant 7ND.
 SQ Sequence 69 AA;

Query Match 100.0%; Score 97; DB 24; Length 69;

Best Local Similarity 100.0%; Pred. No. 4.79e-03;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 43 eicadpkqkvvq 54

QY 1 EICADPKQKVVQ 12

RESULT 6

ID R28680 standard; protein; 76 AA.

AC R87680;

DE 05-MAR-1996 (first entry)

KW Monocyte chemotactic activating factor for use as wound remedy.

OS monocyte chemotactic activating factor; MCAF; wound remedy.

OS Homo sapiens.

PN WO9507710-A1.

PD 23-MAR-1995.

PF 13-SEP-1994; J01512.

PR 13-SEP-1993; JP-227385.

(TORA) TORAY IND INC.

Matsushima K, Naruto M;

WPI: 95-131181/17.

PT Wound treatment using monocyte chemotactic factor - has potent

PT therapeutic effect on skin wounds and ulcers

PS Disclosure: Page 12: 22pp; Japanese.

CC The invention relates to a new remedy for curing wounds which, instead

CC of comprising a growth factor, comprises a monocyte chemotactic

CC activating factor (MCAF) or its variants or derivatives. The factor has

CC potent effect on skin wounds and ulcers. The present sequence is human

CC MCAF, the activity of which is exemplified as the new remedy.

CC Sequence 76 AA;

Query Match

100.0%; Score 97; DB 15; Length 76;

Best Local Similarity 100.0%; Pred. No. 4.79e-03;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 50 eicadpkqkvvq 61

QY 1 EICADPKQKVVQ 12

RESULT 7

ID Will31 standard; protein; 76 AA.
 AC Will31;
 DT 10-JUN-1997 (first entry)
 DE Mature human monocyte chemoattractant protein-1 (MCP-1).
 KW MCP-1; mature chemoattractant protein-1; cytokine; interleukin-8;
 KW IL-8; neutrophil activating peptide; labelling; imaging; targeting;
 KW radionuclide; infection; inflammation; neoplasm; atheromatous lesion;
 KW restenosis.
 OS Homo sapiens.
 FH Key
 FT Location/Qualifiers
 FT misc_difference 1
 FT /note= "X= any amino acid"
 PN US5605671-A.
 PD 25-FEB-1997.
 PF 05-OCT-1992; 956862.
 PR 05-OCT-1992; US-956863.
 PR 05-OCT-1992; US-956862.
 PR 29-APR-1994; US-235659.
 PA (MLCW) MALLINCKRODT MEDICAL INC.
 PA (UNMI) UNIV MICHIGAN
 PI Kunkel SJ, Lyle LR, Strieter RM;
 DR WPI: 97-153541/14.
 DT Radio:labelling neutrophil-activating peptide(s) - for imaging
 PT targeted delivery of radioactive agent
 PS Example 10: Column 19-20; 15pp; English.
 CC Will31 represents mature human monocyte chemoattractant protein-1
 CC (MCP-1). MCP-1 was radionuclide labelled and used in a method for
 CC imaging a target site in vivo in an animal. Labelled MCP-1 was allowed
 CC to accumulate at a target site (having MCP-1 receptors) in the animal
 CC and detected so as to image the target site. Any Cys-Cys or Cys-Xaa-Cys
 CC chemokine carrying either iodine-123 or iodine-131 can be used in the
 CC method. Especially preferred is neutrophil activating peptide-2 (NAP-2)
 CC which recognises interleukin-8 receptors and is labelled with
 CC technetium-99m, indium-111, copper-62, rhodium-186 or rhodium-188.
 CC The method can be used for imaging a site of infection, inflammation,
 CC neoplasm, atheromatous lesion or restenosis.
 SQ Sequence 76 AA;

Query Match 100.0%; Score 97; DB 21; Length 76;

Best Local Similarity 100.0%; Pred. No. 4.79e-03;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 50 eicadpkqkvvq 61

QY 1 EICADPKQKVVQ 12

RESULT 8

ID R28660 standard; protein; 76 AA.

AC R28660;

DT 24-MAR-1993 (first entry)

DE MCF.

KW Plasmid; monocyte chemotactic factor; MCF; translation;

KW termination; terminator; initiation; ribosome binding site;

KW RBS; promoter; tryptophan; repressor.

OS Synthetic.

PN WO9219737-A.

PD 12-NOV-1992.

PF 27-APR-1992; J00550.

PR 09-MAY-1991; JP-135950.

PA (DAIN) DAINIPPON PHARM CO LTD.

PI Fukui T, Matsuo N, Yamada M, Yamagishi J;

DR WPI: 92-398864/48.

DR N-PSDB; Q30745-46.

PT Prod. of polypeptide(s) having monocyte chemotactic activity -

PT using expression plasmids with E. coli elements and specific

PT E.coli strains

PS Claim 1; Page 48 + Page 36; 56pp; English.

CC An expression plasmid, pHM483, for producing MCF(76) consisting

CC of 76 amino acids was constructed. The prod. can be used for e.g.

CC treating bacterial infectious diseases.

CC Sequence 76 AA;

Query Match 100.0%; Score 97; DB 5; Length 76;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 50 eicadpkqkwq 61
 |||||
 QY 1 EICADPKQKWQ 12

RESULT 9
 ID P90292 standard; peptide: 76 AA.
 AC P90292;
 DT 17-JAN-1990 (first entry)
 DE Peptide from human glioma cell line U-105MG.
 KW Glioma; leucocyte; chemotaxis; neoplasms.
 OS Human.

Key modified_site 1 Location/Qualifiers
 /label= OTHER
 /note= "pyroglutamic acid"

PN US7304234-A.
 PD 20-JUL-1989.
 PF 31-JAN-1989; 030423.
 PR 31-JAN-1989; US-304234.
 PA (USSH) US Dept. of Health and Human.
 PI Yoshimura T; Robinson E; Appella E; Leonard E.
 DR WPI: 89-263501/36.
 PT New peptide with specific chemotactic activity for monocytes - isolated from glioma or leucocyte cells, useful for treating infections and neoplasms.
 PS Disclosure: page 3; 46pp; English.
 CC Peptide is derived from glioma cell line U-105MG (ATCC CRL9332) or from leukocytes and has mol. wt. 8400. Used to treat infections and neoplasms.
 SQ Sequence 76 AA;

Query Match 100.0%; Score 97; DB 1; Length 76;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 50 eicadpkqkwq 61
 |||||
 QY 1 EICADPKQKWQ 12

RESULT 10
 ID R87675 standard; protein: 76 AA.
 DT 21-FEB-1996 (first entry)
 DE (28-Asp) MCP-1.
 KW monocyte chemoattractant protein: MCP-1; mutant; restenosis;
 KW angioplasty.
 OS Homo sapiens.

Key modified_site 28 Location/Qualifiers
 /note= "Tyr in the native sequence is replaced by Asp"

FT disulfide_bond 11..36
 FT disulfide_bond 12..52
 PN W09513295-A1.
 PD 18-MAY-1995.
 PF 07-NOV-1994; U12874.
 PR 12-NOV-1993; US-152301.
 PA (DAND) DANA FARBER CANCER INST INC.
 PI Rollins B; Zhang YJ;
 DR WPI: 95-215051/28.
 PT Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis
 PS Claim 3; Page 11; 22pp; English.
 CC Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg

CC by phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.
 CC The peptides can be used to prevent restenosis, e.g. in patients undergoing coronary artery angioplasty.
 SQ Sequence 76 AA;

Query Match 100.0%; Score 97; DB 14; Length 76;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 50 eicadpkqkwq 61
 |||||
 QY 1 EICADPKQKWQ 12

RESULT 11
 ID W09374 standard; Protein: 76 AA.
 AC W09374;
 DT 21-MAR-1997 (first entry)
 DE Monocyte chemotactic protein 1.
 KW Human; monocyte chemoattractant protein; antisense; inhibition;
 KW mononuclear cell; lymphocyte; macrophage; smooth muscle cell;
 KW vascular restenosis.
 OS Homo sapiens.

Key modified_site 1 Location/Qualifiers
 /note= "encoded by codon CAG"

FT misc_difference 51
 FT misc_difference 51
 FT misc_difference 65
 FT misc_difference 65
 FT misc_difference 65
 FT misc_difference 65
 PN US5571713-A.
 PD 05-NOV-1996.
 PF 22-OCT-1992; 965678.
 PR 22-OCT-1992; US-965678.
 PR 27-MAY-1994; US-250958.
 PA (UNMI) UNIV MICHIGAN.
 PI Kunkel SL; Lyle LR; Strieter RM;
 DR WPI: 96-505405/50.
 DR N-PSDB: T48092.
 PT Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) - useful for therapy or diagnosis of restenosis, etc.
 PS Disclosure: Column 13-14; 16pp; English.
 CC This is the amino acid sequence of the human monocyte chemoattractant protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent stimulator of monocyte chemotaxis and is produced by injured vascular smooth cells thus attracting monocytes and macrophages which infiltrate the injured area and release growth factor. This causes proliferation of the vascular smooth cells resulting in restenosis. The gene sequence can be used to generate antisense sequences e.g. 148093-7, which can be used to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes or macrophages, or smooth muscle cells, esp. in order to prevent vascular restenosis.
 SQ Sequence 76 AA;

Query Match 100.0%; Score 97; DB 20; Length 76;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 50 eicadpkqkwq 61
 |||||
 QY 1 EICADPKQKWQ 12

RESULT 12
 ID R53398 standard; Protein: 76 AA.
 AC R53398;
 DT 15-DEC-1994 (first entry)
 DE Sense MCP-1.
 KW Antisense; RNA; DNA; monocyte chemotactic protein-1; MCP-1;
 KW radionuclide; vascular restenosis; alpha; beta; emitting isotope;

KW diagnosis; monocytes; vascular injury.
 OS Mammalian.
 FH Key Location/Qualifiers
 FT misc_difference 1 /note= "Unspecified amino acid"
 PN WO9409128-A.
 PD 28-APR-1994.
 PF 20-OCT-1993; U10074.
 PR 22-OCT-1992; US-965678.
 PA (MLCW) MALLINCKRODT MEDICAL INC.
 PI Lyle LR;
 DR WPI: 94-151314/18.
 PT Anti-sense monocyte chemotactic protein-1 oligo:nucleotide(s) and peptide(s) - is used for inhibiting, treating or imaging areas of vascular restenosis or potential restenosis
 PS Disclosure: Page 5; 42pp; English.
 CC The sequences given in R5398-99 represent sense and antisense monocyte chemotactic protein-1 (MCP-1) respectively. These oligonucleotides may be labelled with a radionuclide and use therapeutically for the treatment of vascular restenosis.
 CC Radiolabelled antisense MCP-1 compounds may be constructed using high energy alpha or beta emitting isotopes rather than the gamma emitters customarily used for diagnostic purposes. Antisense MCP-1 compounds inactivate MCP-1 or inhibit production of MCP-1 so that monocytes are not attracted to the area of vascular injury and proliferation of vascular cells is inhibited.
 CC Sequence 76 AA;
 Query Match 100.0%; Score 97; DB 10; Length 76;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 50 eicadpdkqkvq 61
 |||||
 QY 1 EICADPKQKQVQ 12
 RESULT 13
 ID R87677 standard; protein; 76 AA.
 AC R87677;
 DT 21-FEB-1996 (first entry)
 DE (3-Ala) MCP-1.
 KW monocyte chemoattractant protein; MCP-1; mutant; restenosis;
 KW angioplasty.
 OS Homo sapiens.
 FH Key Location/Qualifiers
 FT modified_site 3
 FT disulfide_bond 11..36
 FT disulfide_bond 12..52
 FT WO9513295-A1.
 PD 18-MAY-1995.
 PF 07-NOV-1994; U12874.
 PR 12-NOV-1993; US-152301.
 PA (DAND) DANA FARBER CANCER INST INC.
 PI Rollins B, Zhang YJ;
 DR WPI: 95-215051/28.
 PT Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis
 PS Claim 6; Page 11; 22pp; English.
 CC Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28-Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.
 CC The peptides can be used to prevent restenosis, e.g. in patients undergoing coronary artery angioplasty.
 CC Sequence 76 AA;
 Query Match 100.0%; Score 97; DB 10; Length 76;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 50 eicadpdkqkvq 61
 |||||
 QY 1 EICADPKQKQVQ 12
 RESULT 13
 ID R87677 standard; protein; 76 AA.
 AC R87677;
 DT 21-FEB-1996 (first entry)
 DE (3-Ala) MCP-1.
 KW monocyte chemoattractant protein; MCP-1; mutant; restenosis;
 KW angioplasty.
 OS Homo sapiens.
 FH Key Location/Qualifiers
 FT modified_site 3
 FT disulfide_bond 11..36
 FT disulfide_bond 12..52
 FT WO9513295-A1.
 PD 18-MAY-1995.
 PF 07-NOV-1994; U12874.
 PR 12-NOV-1993; US-152301.
 PA (DAND) DANA FARBER CANCER INST INC.
 PI Rollins B, Zhang YJ;
 DR WPI: 95-215051/28.
 PT Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis
 PS Claim 6; Page 11; 22pp; English.
 CC Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28-Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.
 CC The peptides can be used to prevent restenosis, e.g. in patients undergoing coronary artery angioplasty.
 CC Sequence 76 AA;
 Query Match 100.0%; Score 97; DB 14; Length 76;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 50 eicadpdkqkvq 61
 |||||
 QY 1 EICADPKQKQVQ 12
 RESULT 15
 ID R86859 standard; Protein; 77 AA.
 AC R86859;
 DT 20-MAR-1996 (first entry)
 DE Mature MCP-1.
 KW Antisense; monocyte chemotactic protein-1; MCP-1;
 KW "C-C" family; chemoattractant cytokine; chemokine; stimulation;
 KW monocyte; chemotaxis; vascular smooth muscle cell; macrophage;
 KW proliferation; restenosis; balloon angioplasty.
 OS Homo sapiens.
 PN WO9519167-A1.
 PD 20-JUL-1995.
 PF 13-JAN-1995; U00605;
 PR 14-JAN-1994; US-182917.
 PA (MLCW) MALLINCKRODT MEDICAL INC.
 PI Lyle LR, Thomas-Miller B;
 DR WPI: 95-263703/34.

Query Match 100.0%; Score 97; DB 14; Length 76;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 50 eicadpdkqkvq 61
 |||||
 QY 1 EICADPKQKQVQ 12
 RESULT 14
 ID R87676 standard; protein; 76 AA.
 AC R87676;
 DT 21-FEB-1996 (first entry)
 DE (24-Arg) MCP-1.
 KW monocyte chemoattractant protein; MCP-1; mutant; restenosis;
 KW angioplasty.
 OS Homo sapiens.
 FH Key Location/Qualifiers
 FT modified_site 24
 FT disulfide_bond 11..36
 FT disulfide_bond 12..52
 FT WO9513295-A1.
 PD 18-MAY-1995.
 PF 07-NOV-1994; U12874.
 PR 12-NOV-1993; US-152301.
 PA (DAND) DANA FARBER CANCER INST INC.
 PI Rollins B, Zhang YJ;
 DR WPI: 95-215051/28.
 PT Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis
 PS Claim 5; Page 11; 22pp; English.
 CC Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28-Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.
 CC The peptides can be used to prevent restenosis, e.g. in patients undergoing coronary artery angioplasty.
 CC Sequence 76 AA;
 Query Match 100.0%; Score 97; DB 14; Length 76;
 Best Local Similarity 100.0%; Pred. No. 4.79e-03;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 50 eicadpdkqkvq 61
 |||||
 QY 1 EICADPKQKQVQ 12
 RESULT 15
 ID R86859 standard; Protein; 77 AA.
 AC R86859;
 DT 20-MAR-1996 (first entry)
 DE Mature MCP-1.
 KW Antisense; monocyte chemotactic protein-1; MCP-1;
 KW "C-C" family; chemoattractant cytokine; chemokine; stimulation;
 KW monocyte; chemotaxis; vascular smooth muscle cell; macrophage;
 KW proliferation; restenosis; balloon angioplasty.
 OS Homo sapiens.
 PN WO9519167-A1.
 PD 20-JUL-1995.
 PF 13-JAN-1995; U00605;
 PR 14-JAN-1994; US-182917.
 PA (MLCW) MALLINCKRODT MEDICAL INC.
 PI Lyle LR, Thomas-Miller B;
 DR WPI: 95-263703/34.

DR N-PSDB: T03528.
PT New anti-sense oligo:nucleotide(s) and peptide(s) for inhibiting
PT restenosis - are directed against C-C family cytokine(s) such as
PT monocyte chemotactic protein, opt. radio:labelled for therapy or
PT imaging
PS Disclosure; Page 5; 50pp; English.
CC This sequence represents the mature form of monocyte chemotactic
CC protein-1 (MCP-1). MCP-1 is a member of the "C-C" family of
CC chemoattractant cytokines or chemokines. It is a potent stimulator
CC of monocyte chemotaxis and has an extremely high degree of specificity
CC for this cell type. MCP-1 is produced by injured vascular smooth muscle
CC cells and attracts the monocytes and macrophages which infiltrate the
CC area, releasing growth factors and resulting in proliferation of vascular
CC smooth muscle and restenosis. Nucleic acid molecules which are antisense
CC to the MCP-1 mRNA may be used to inhibit translation of MCP-1 and so may
CC be useful for inhibiting vascular restenosis, partic. following balloon
CC angioplasty or a related process. The molecule may be radiolabelled to
CC increase its therapeutic effect or for imaging areas of potential
CC restenosis.
CC Sequence 77 AA:
SQ

Query Match 100.0%; Score 97; DB 15; Length 77;
Best Local Similarity 100.0%; Pred. No. 4.79e-03;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

b 51 eicadpdkkwq 62
|||||
2y 1 EICADPKQKWWQ 12

Search completed: Tue Mar 30 17:40:38 1999
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##experimental_source glioma cell line U-105MG
REFERENCE I51841
  #authors Yoshimura, T.; Leonard, E.J.
  #journal Adv. Exp. Med. Biol. (1991) 305:47-56
  #title Human monocyte chemoattractant protein-1 (MCP-1).
  #cross-references MUID:92095166
  #accession I51841
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  ##cross-references GB:S71513; NID:g240867; PID:g240868
REFERENCE A60299
  #authors Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani, A.
  #journal Int. J. Cancer (1990) 45:795-797
  #title A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic and activating factor (MCP-1/MCAF).
  #accession A60299
  #status not compared with conceptual translation
  #molecule_type mRNA
  #residues 1-99 #label BOT
REFERENCE A32300
  #authors Furutani, Y.; Nomura, H.; Notake, M.; Oyama, Y.; Fukui, T.; Yamada, M.; Larsen, C.G.; Oppenheim, J.J.; Matsushima, K.
  #journal Biochem. Biophys. Res. Commun. (1989) 159:249-255
  #title Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).
  #cross-references MUID:89165862
  #accession A32300
  #status not compared with conceptual translation
  #molecule_type mRNA
  #residues 1-99 #label FUR
REFERENCE A32396
  #authors Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowitz, J.; Hunt, D.F.; Appella, E.
  #journal Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1950-1954
  #title Complete amino acid sequence of a human monocyte chemoattractant, a putative mediator of cellular immune reactions.
  #cross-references MUID:89184525
  #accession A32396
  #molecule_type protein
  #residues 1-99 #label ROB
REFERENCE A34561
  #authors Decock, B.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Van Damme, J.
  #journal Biochem. Biophys. Res. Commun. (1990) 167:904-909
  #title Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally processed form.
  #cross-references MUID:90211336
  #accession A34561
  #molecule_type protein
  #residues 29-33, 'XX', 36-52:82-92 #label DEC
REFERENCE I57498
  #authors Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E.
  #journal Mol. Cell. Biochem. (1993) 126:61-68
  #title The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo.
  #cross-references MUID:94150478
  #accession I57498
  #status translated from GB/EMBL/DBJ
  #molecule_type mRNA
  #residues 1-99 #label LIY
  ##cross-references GB:S69738; NID:g545464; PID:g545465
REFERENCE J01096
  #authors Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F.
  #journal Chinese J. Microbiol. Immunol. (1994) 14:29-32
  #title The PCR, cloning and sequencing of human monocyte

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#accession J01096
  #molecule_type mRNA
  #residues 24-28, 'Q', 30-99 #label YEO
GENETICS
  #gene GDB:SCYA2
  ##cross-references GDB:125279; OMIM:158105
  #map_position 17q11.2-17q12
  #CLASSIFICATION #superfamily macrophage inflammatory protein
  #KEYWORDS cytokine; glycoprotein; inflammation; pyroglutamic acid
  #FEATURE
    1-23 #domain signal sequence #status predicted #label SIG\
    24-99 #product monocyte chemoattractant protein 1 #status experimental #label MAR\
    29-99 #product monocyte chemoattractant protein 1, short form #status experimental #label MAR2\
    24 #modified_site pyrrolidone carboxylic acid (Gln) (in mature form) #status experimental\
    37 #binding_site carbohydrate (Asn) (covalent) #status predicted
  #SUMMARY #length 99 #molecular-weight 11025 #checksum 7984
    Query Match 100.0%; Score 97; DB 2; Length 99;
    Best Local Similarity 100.0%; Pred. No. 1.33e-08;
    Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
    Db 73 EICADPKQKWKQ 84
    Qy 1 EICADPKQKWKQ 12
  RESULT 2
  ENTRY J02136 #type complete
  TITLE monocyte chemoattractant protein-1 precursor - pig
  ORGANISM #formal_name Sus scrofa domestica #common_name domestic pig
  DATE 30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change 08-Sep-1997
  ACCESSIONS J02136; S57498
  REFERENCE J02136
  #authors Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
  #journal Biochem. Biophys. Res. Commun. (1994) 199:962-968
  #title Porcine luteal cells express monocyte chemoattractant protein-1 (MCP-1): Analysis by polymerase chain reaction and cDNA cloning.
  #accession J02136
  #molecule_type mRNA
  #residues 1-99 #label ROS
REFERENCE S57497
  #authors Zach, O.
  #submission submitted to the EMBL Data Library, July 1994
  #accession S57498
  #status preliminary
  #molecule_type mRNA
  #residues 1-99 #label ZAC
  ##cross-references EMBL:X79416; NID:g872312; PID:g872313
  #CLASSIFICATION #superfamily macrophage inflammatory protein
  #KEYWORDS glycoprotein
  #FEATURE
    1-23 #domain signal sequence #status predicted #label SIG\
    24-99 #product monocyte chemoattractant protein-1 #status predicted #label MAR\
    94 #binding_site carbohydrate (Asn) (covalent) #status predicted
  #SUMMARY #length 99 #molecular-weight 10976 #checksum 9768
    Query Match 99.0%; Score 96; DB 2; Length 99;
    Best Local Similarity 91.7%; Pred. No. 2.24e-08;
    Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
    Db 73 EICADPKQKWKQ 84
    Qy 1 EICADPKQKWKQ 12

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RESULT 3
ENTRY
TITLE monocyte chemoattractant protein 1 precursor - bovine
ALTERNATE_NAMES monocyte chemotactic factor 1; seminal plasma protein p6
ORGANISM Bos primigenius taurus #common_name cattle
DATE 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change
31-Oct-1997
ACCESSIONS A39296 #type complete
REFERENCE A39296: B39296
#authors Wempe, F.; Henschen, A.; Scheit, K.H.
#journal DNA Cell Biol. (1991) 10:671-679
#title Gene expression and cDNA cloning identified a major basic
protein constituent of bovine seminal plasma as bovine
monocyte-chemoattractant protein-1 (MCP-1).
#cross-references MUID:92096117
#accession A39296
#molecule_type mRNA
#residues 1-99 #label WEM
#cross-references GB:M84602; GB:M85264; NID:g163394; PID:g163395
#accession B39296
#molecule_type protein
#residues 50-68,'X',70-74,'X',76 #label WE2
#experimental_source seminal vesicle
#superfamily macrophage inflammatory protein
KEYWORDS glycoprotein
FEATURE
1-23
24-99
94
#domain signal sequence #status predicted #label SIG\
#product monocyte chemoattractant protein 1 #status
predicted #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
predicted
SUMMARY
#length 99 #molecular_weight 11114 #checksum 9401
Query Match 94.8%; Score 92; DB 2; Length 99;
Best Local Similarity 91.7%; Pred. No. 1.78e-07;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 73 ELCADPKQKWQ 84
1:|||||
QY 1 EICADPKQKWQ 12

RESULT 4
ENTRY
TITLE monocyte chemoattractant protein-1 - bovine
ALTERNATE_NAMES monocyte chemotactic factor 1; seminal plasma protein p6
ORGANISM Bos primigenius indicus #common_name zebu cattle
DATE 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
03-May-1996
#SSIONS JC2336 #type complete
#RENCE JC2336
#authors Wempe, F.; Kuhlmann, J.K.; Scheit, K.H.
#journal Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
#title Characterization of the bovine monocyte chemoattractant
protein-1 gene.
#accession JC2336
#molecule_type protein
#residues 1-99 #label WEM
GENETICS
#gene MCP-1
#introns 26/1: 65/2
CLASSIFICATION #superfamily macrophage inflammatory protein
SUMMARY #length 99 #molecular_weight 11114 #checksum 9401
Query Match 94.8%; Score 92; DB 2; Length 99;
Best Local Similarity 91.7%; Pred. No. 1.78e-07;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 73 ELCADPKQKWQ 84
1:|||||
QY 1 EICADPKQKWQ 12

RESULT 5
ENTRY
TITLE monocyte chemoattractant protein-1 - rabbit
ALTERNATE_NAMES monocyte chemotactic factor 1; seminal plasma protein p6
ORGANISM Bos primigenius taurus #common_name cattle
DATE 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change
31-Oct-1997
ACCESSIONS A39296 #type complete
REFERENCE A39296: B39296
#authors Wempe, F.; Henschen, A.; Scheit, K.H.
#journal DNA Cell Biol. (1991) 10:671-679
#title Gene expression and cDNA cloning identified a major basic
protein constituent of bovine seminal plasma as bovine
monocyte-chemoattractant protein-1 (MCP-1).
#cross-references MUID:92096117
#accession A39296
#molecule_type mRNA
#residues 1-99 #label WEM
#cross-references GB:M84602; GB:M85264; NID:g163394; PID:g163395
#accession B39296
#molecule_type protein
#residues 50-68,'X',70-74,'X',76 #label WE2
#experimental_source seminal vesicle
#superfamily macrophage inflammatory protein
KEYWORDS glycoprotein
FEATURE
1-23
24-99
94
#domain signal sequence #status predicted #label SIG\
#product monocyte chemoattractant protein 1 #status
predicted #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
predicted
SUMMARY
#length 99 #molecular_weight 11114 #checksum 9401
Query Match 94.8%; Score 92; DB 2; Length 99;
Best Local Similarity 91.7%; Pred. No. 1.78e-07;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 73 ELCADPKQKWQ 84
1:|||||
QY 1 EICADPKQKWQ 12

RESULT 6
ENTRY
TITLE monocyte chemoattractant protein 3 precursor - human
ALTERNATE_NAMES monocyte chemoattractant protein MCP-3
ORGANISM Homo sapiens #common_name man
DATE 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change
24-Sep-1998
ACCESSIONS A54678 #type complete
REFERENCE A54678: S32222
#authors Odenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.;
Speleman, F.; Laureys, G.; Van Damme, J.
#journal Genomics (1994) 21:403-408
#title The human MCP-3 gene (SCYA7): cloning, sequence analysis, and
assignment to the C-C chemokine gene cluster on chromosome
17q11.2-q12.
#accession A54678
#molecule_type DNA
#residues 1-109 #label OPD
#cross-references GB:X72309
REFERENCE JC1478
#authors Odenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme,
J.
#journal Biochem. Biophys. Res. Commun. (1993) 191:535-542
#title Human monocyte chemoattractant protein-3 (MCP-3): Molecular
cloning of the cDNA and comparison with other chemokines.
#accession JC1478
#molecule_type mRNA
#residues 1-109 #label OP2
REFERENCE S32222
#authors Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun,
P.; Magazin, M.; Miloux, B.; Minty, C.; Ramond, P.; Vita,
N.; Lupker, J.; Shire, D.; Ferrara, P.; Caput, D.
#submission submitted to the EMBL Data Library, March 1993
#description Molecular cloning of MCP-3: a human monocyte-derived monocyte
chemoattractant protein.
#accession S32222
#molecule_type mRNA
#residues 1-109 #label MIN
#cross-references EMBL:X71087; NID:g288396; PID:g288397
COMMENT This protein induces proteinase secretion and chemotaxis by

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RESULT 5
ENTRY
TITLE monocyte chemoattractant protein-1 - rabbit
ALTERNATE_NAMES monocyte chemotactic factor 1; seminal plasma protein p6
ORGANISM Bos primigenius taurus #common_name cattle
DATE 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change
31-Oct-1997
ACCESSIONS A39296 #type complete
REFERENCE A39296: B39296
#authors Wempe, F.; Henschen, A.; Scheit, K.H.
#journal DNA Cell Biol. (1991) 10:671-679
#title Gene expression and cDNA cloning identified a major basic
protein constituent of bovine seminal plasma as bovine
monocyte-chemoattractant protein-1 (MCP-1).
#cross-references MUID:92096117
#accession A39296
#molecule_type mRNA
#residues 1-99 #label WEM
#cross-references GB:M84602; GB:M85264; NID:g163394; PID:g163395
#accession B39296
#molecule_type protein
#residues 50-68,'X',70-74,'X',76 #label WE2
#experimental_source seminal vesicle
#superfamily macrophage inflammatory protein
KEYWORDS glycoprotein
FEATURE
1-23
24-99
94
#domain signal sequence #status predicted #label SIG\
#product monocyte chemoattractant protein 1 #status
predicted #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
predicted
SUMMARY
#length 99 #molecular_weight 11114 #checksum 9401
Query Match 94.8%; Score 92; DB 2; Length 99;
Best Local Similarity 91.7%; Pred. No. 1.78e-07;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 73 ELCADPKQKWQ 84
1:|||||
QY 1 EICADPKQKWQ 12

RESULT 6
ENTRY
TITLE monocyte chemoattractant protein 3 precursor - human
ALTERNATE_NAMES monocyte chemoattractant protein MCP-3
ORGANISM Homo sapiens #common_name man
DATE 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change
24-Sep-1998
ACCESSIONS A54678 #type complete
REFERENCE A54678: S32222
#authors Odenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.;
Speleman, F.; Laureys, G.; Van Damme, J.
#journal Genomics (1994) 21:403-408
#title The human MCP-3 gene (SCYA7): cloning, sequence analysis, and
assignment to the C-C chemokine gene cluster on chromosome
17q11.2-q12.
#accession A54678
#molecule_type DNA
#residues 1-109 #label OPD
#cross-references GB:X72309
REFERENCE JC1478
#authors Odenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme,
J.
#journal Biochem. Biophys. Res. Commun. (1993) 191:535-542
#title Human monocyte chemoattractant protein-3 (MCP-3): Molecular
cloning of the cDNA and comparison with other chemokines.
#accession JC1478
#molecule_type mRNA
#residues 1-109 #label OP2
REFERENCE S32222
#authors Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun,
P.; Magazin, M.; Miloux, B.; Minty, C.; Ramond, P.; Vita,
N.; Lupker, J.; Shire, D.; Ferrara, P.; Caput, D.
#submission submitted to the EMBL Data Library, March 1993
#description Molecular cloning of MCP-3: a human monocyte-derived monocyte
chemoattractant protein.
#accession S32222
#molecule_type mRNA
#residues 1-109 #label MIN
#cross-references EMBL:X71087; NID:g288396; PID:g288397
COMMENT This protein induces proteinase secretion and chemotaxis by

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macrophages and monocytes.
GENETICS
#gene GDB:SCYA7; SCYA6; MCP-3
##cross-references GDB:138473; OMIM:158106
#map_position 17q11-17q12
#introns 36/1: 75/2
CLASSIFICATION #superfamily macrophage inflammatory protein
KEYWORDS cytokine; glycoprotein; inflammation
FEATURE
1-33 #domain signal sequence #status predicted #label SIG\
34-109 #product monocyte chemotactic protein 3 #status
39 #binding_site carbohydrate (Asn) (covalent) #status
predicted
SUMMARY #length 109 #molecular-weight 12356 #checksum 1535
ery Match 92.8%; Score 90; DB 2; Length 109;
st Local Similarity 91.7%; Pred. No. 4.96e-07;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Db 83 EICADPTQKRWQ 94
Dy 1 EICADPKQKRWQ 12
RESULT 7
ENTRY JC2417 #type complete
TITLE monocyte chemoattractant protein-2 - pig
ORGANISM #formal_name Sus scrofa domestica #common_name domestic pig
DATE 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change
03-May-1996
ACCESSIONS JC2417
REFERENCE JC2417
#authors Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
#journal Biochem. Biophys. Res. Commun. (1994) 205:148-153
#title Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analysis by cDNA cloning and northern analysis.
#accession JC2417
#molecule_type mRNA
#residues 1-99 #label HOS
#experimental_source Corpus luteum
CLASSIFICATION #superfamily macrophage inflammatory protein
FEATURE
23 #domain signal sequence #status predicted #label SIG\
24-99 #product monocyte chemoattractant protein-2 #status
predicted #label MAT
SUMMARY #length 99 #molecular-weight 10903 #checksum 7556
Query Match 90.7%; Score 88; DB 2; Length 99;
Best Local Similarity 83.3%; Pred. No. 1.37e-06;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Db 73 EVCADPQKRWQ 84
Dy 1 EICADPKQKRWQ 12
RESULT 8
ENTRY I48147 #type complete
TITLE monocyte chemoattractant protein-1 - guinea pig
ORGANISM #formal_name Cavia porcellus #common_name guinea pig
DATE 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
09-May-1997
ACCESSIONS I48147
REFERENCE I48147
#authors Yoshimura, T.
#journal J. Immunol. (1993) 150:5025-5032
#title cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression of the recombinant protein.
#cross-references MUID:93267104
#accession I48147
macrophages and monocytes.
GENETICS
#gene GDB:SCYA7; SCYA6; MCP-3
##cross-references GDB:138473; OMIM:158106
#map_position 17q11-17q12
#introns 36/1: 75/2
CLASSIFICATION #superfamily macrophage inflammatory protein
KEYWORDS cytokine; glycoprotein; inflammation
FEATURE
1-33 #domain signal sequence #status predicted #label SIG\
34-109 #product monocyte chemotactic protein 3 #status
39 #binding_site carbohydrate (Asn) (covalent) #status
predicted
SUMMARY #length 109 #molecular-weight 12356 #checksum 1535
ery Match 92.8%; Score 90; DB 2; Length 109;
st Local Similarity 91.7%; Pred. No. 4.96e-07;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Db 83 EICADPTQKRWQ 94
Dy 1 EICADPKQKRWQ 12
RESULT 7
ENTRY JC2417 #type complete
TITLE monocyte chemoattractant protein-2 - pig
ORGANISM #formal_name Sus scrofa domestica #common_name domestic pig
DATE 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change
03-May-1996
ACCESSIONS JC2417
REFERENCE JC2417
#authors Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
#journal Biochem. Biophys. Res. Commun. (1994) 205:148-153
#title Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analysis by cDNA cloning and northern analysis.
#accession JC2417
#molecule_type mRNA
#residues 1-99 #label HOS
#experimental_source Corpus luteum
CLASSIFICATION #superfamily macrophage inflammatory protein
FEATURE
23 #domain signal sequence #status predicted #label SIG\
24-99 #product monocyte chemoattractant protein-2 #status
predicted #label MAT
SUMMARY #length 99 #molecular-weight 10903 #checksum 7556
Query Match 90.7%; Score 88; DB 2; Length 99;
Best Local Similarity 83.3%; Pred. No. 1.37e-06;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Db 73 EVCADPQKRWQ 84
Dy 1 EICADPKQKRWQ 12
RESULT 8
ENTRY I48147 #type complete
TITLE monocyte chemoattractant protein-1 - guinea pig
ORGANISM #formal_name Cavia porcellus #common_name guinea pig
DATE 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
09-May-1997
ACCESSIONS I48147
REFERENCE I48147
#authors Yoshimura, T.
#journal J. Immunol. (1993) 150:5025-5032
#title cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression of the recombinant protein.
#cross-references MUID:93267104
#accession I48147
preliminary; translated from GB/EMBL/DBJ
#molecule_type mRNA
#residues 1-120 #label RES
#cross-references GB:L04985; NID:g349820; PID:g349821
GENETICS MCP-1
#gene
CLASSIFICATION #superfamily macrophage inflammatory protein
SUMMARY #length 120 #molecular-weight 13741 #checksum 9252
Query Match 90.7%; Score 88; DB 2; Length 120;
Best Local Similarity 83.3%; Pred. No. 1.37e-06;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Db 71 EVCADPTQKRWQ 82
Dy 1 EICADPKQKRWQ 12
RESULT 9
ENTRY JC4912 #type complete
TITLE eotaxin - human
ORGANISM #formal_name Homo sapiens #common_name man
DATE 01-Nov-1996 #sequence_revision 01-Nov-1996 #text_change
08-Sep-1997
ACCESSIONS JC4912
REFERENCE JC4912
#authors Bartels, J.; Schlueter, C.; Richter, E.; Noso, N.; Kulke, R.; Christophers, E.; Schroeder, J.M.
#journal Biochem. Biophys. Res. Commun. (1996) 225:1045-1051
#title Human dermal fibroblasts express eotaxin: Molecular cloning, mRNA expression, and identification of eotaxin sequence variants.
#accession JC4912
#molecule_type mRNA
#residues 1-97 #label BAR
#cross-references EMBL:Z75668; NID:g1531982; PID:e251275; PID:g1531983
#experimental_source Dermal fibroblast
COMMENT This protein has eosinophil specific chemotactic activity.
CLASSIFICATION #superfamily macrophage inflammatory protein
KEYWORDS fibroblast
FEATURE
1-18 #domain signal sequence #status predicted #label SIG\
19-97 #product eotaxin #status predicted #label MAT
SUMMARY #length 97 #molecular-weight 10790 #checksum 448
Query Match 88.7%; Score 86; DB 2; Length 97;
Best Local Similarity 75.0%; Pred. No. 3.77e-06;
Matches 9; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Db 71 DICADPKKRWQ 82
Dy 1 EICADPKQKRWQ 12
RESULT 10
ENTRY JN0841 #type complete
TITLE interleukin-8 - dog
ORGANISM #formal_name Canis lupus familiaris #common_name dog
DATE 19-May-1994 #sequence_revision 19-May-1994 #text_change
12-Apr-1995
ACCESSIONS JN0841
REFERENCE JN0841
#authors Ishikawa, J.; Suzuki, S.; Hotta, K.; Hirota, Y.; Mizuno, S.; Suzuki, K.
#journal Gene (1993) 131:305-306
#title Cloning of a canine gene homologous to the human interleukin-8-encoding gene.
#accession JN0841
#molecule_type DNA
#residues 1-95 #label ISH
COMMENT This protein is a polymorphonuclear leukocytes chemotactic factor and is involved in the host defense function.

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GENETICS
#introns
22/1: 67/2
CLASSIFICATION #superfamily beta-thromboglobulin
SUMMARY #length 95 #molecular-weight 10611 #checksum 3157

Query Match 86.6%; Score 84; DB 2; Length 95;
Best Local Similarity 90.9%; Pred. No. 1.03e-05;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 75 EVCLDPKQKWQ 81
QY 1 EICADPKQKWQ 12

RESULT 11
ENTRY JC2478 #type complete
TITLE eotaxin - rat
ORGANISM #formal_name Rattus norvegicus #common_name Norway rat
DATE 21-Feb-1995 #sequence_revision 05-Apr-1995 #text_change
08-Sep-1997
ACCESSIONS JC2478
REFERENCE authors
Jose, P.J.; Adcock, I.M.; Griffiths-Johnson, D.A.; Berkman,
N.; Wells, T.N.C.; Williams, T.J.; Power, C.A.
Biochem. Biophys. Res. Commun. (1994) 205:788-794
#journal Eotaxin: Cloning of an eosinophil chemoattractant cytokine
#title and increased mRNA expression in allergen-challenged
guinea-pig lungs.
#accession JC2478
#molecule_type mRNA
#residues 1-96 #label JOS
#cross-references EMBL:X77603; NID:g602551; PID:g602552
COMMENT This protein is identified as a potent eosinophil chemoattractant.
CLASSIFICATION #superfamily macrophage inflammatory protein
KEYWORDS glycoprotein
FEATURE
1-23 #domain signal sequence #status predicted #label SIG\
24-96 #product eotaxin #status predicted #label MAT\
93 #binding_site carbohydrate (Thr) (covalent) #status
predicted
SUMMARY #length 96 #molecular-weight 10695 #checksum 7329

Query Match 86.6%; Score 84; DB 2; Length 96;
Best Local Similarity 90.9%; Pred. No. 1.03e-05;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 71 ICADPKKKKWQ 81
QY 2 ICADPKQKWQ 12

LT 12
ENTRY I48099 #type complete
TITLE eotaxin precursor - guinea pig
ORGANISM #formal_name Cavia porcellus #common_name guinea pig
DATE 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
09-May-1997
ACCESSIONS I48099
REFERENCE Rothenberg, M.E.; Luster, A.D.; Lilly, C.M.; Drazen, J.M.;
Leder, P.
J. Exp. Med. (1995) 181:1211-1216
#journal Constitutive and allergen-induced expression of eotaxin mRNA
#title in the guinea pig lung.
#cross-references MUID:95173589
#accession I48099
#status preliminary; translated from GB/EMBL/DBJ
#molecule_type mRNA
#residues 1-96 #label RES
#cross-references EMBL:U18941; NID:g687655; PID:g687656
CLASSIFICATION #superfamily macrophage inflammatory protein
SUMMARY #length 96 #molecular-weight 10753 #checksum 7236

Query Match 86.6%; Score 84; DB 2; Length 96;
Best Local Similarity 90.9%; Pred. No. 1.03e-05;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 75 EVCLDPKQKWQ 86
QY 1 EICADPKQKWQ 12

RESULT 14
ENTRY S42496 #type complete
TITLE interleukin 8 - sheep
ORGANISM #formal_name Ovis orientalis aries, Ovis ammon aries
#common_name domestic sheep
DATE 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
08-Sep-1997
ACCESSIONS S42496
REFERENCE Legastelois, I.; Greenland, T.; Arnaud, P.; Mornex, J.F.;
Cordier, G.
#submission submitted to the EMBL Data Library, March 1994
#description Nucleotide sequence of ovine interleukin 8 cDNA using
polymerase chain reaction.
#accession S42496
#status preliminary
#molecule_type mRNA
#residues 1-101 #label LEG
#cross-references EMBL:X78306; NID:g463253; PID:g463254
CLASSIFICATION #superfamily beta-thromboglobulin
SUMMARY #length 101 #molecular-weight 11292 #checksum 294

Query Match 86.6%; Score 84; DB 2; Length 101;
Best Local Similarity 75.0%; Pred. No. 1.03e-05;
Matches 9; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Db 75 EVCLDPKQKWQ 86
QY 1 EICADPKQKWQ 12

RESULT 15
ENTRY S42496 #type complete
TITLE interleukin 8 - sheep
ORGANISM #formal_name Ovis orientalis aries, Ovis ammon aries
#common_name domestic sheep
DATE 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
08-Sep-1997
ACCESSIONS S42496
REFERENCE Legastelois, I.; Greenland, T.; Arnaud, P.; Mornex, J.F.;
Cordier, G.
#submission submitted to the EMBL Data Library, March 1994
#description Nucleotide sequence of ovine interleukin 8 cDNA using
polymerase chain reaction.
#accession S42496
#status preliminary
#molecule_type mRNA
#residues 1-101 #label LEG
#cross-references EMBL:X78306; NID:g463253; PID:g463254
CLASSIFICATION #superfamily beta-thromboglobulin
SUMMARY #length 101 #molecular-weight 11292 #checksum 294

Query Match 86.6%; Score 84; DB 2; Length 101;
Best Local Similarity 75.0%; Pred. No. 1.03e-05;
Matches 9; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Db 75 EVCLDPKQKWQ 86
QY 1 EICADPKQKWQ 12

RESULT 15

```

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ENTRY      A53096      #type complete
TITLE      Interleukin-8 precursor - pig
ORGANISM   #formal_name Sus scrofa domestica #common_name domestic pig
DATE       02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change
           08-Sep-1997
ACCESSIONS A53096
REFERENCE   A53096
#authors   Lin, G.; Pearson, A.E.; Scamurra, R.W.; Zhou, Y.; Baarsch,
           M.J.; Weiss, D.J.; Murtaugh, M.P.
#journal   J. Biol. Chem. (1994) 269:77-85
#title     Regulation of interleukin-8 expression in porcine alveolar
           macrophages by bacterial lipopolysaccharide.
#accession A53096
#status    Preliminary
#molecule_type mRNA
#residues  1-103 #label LIN
#cross-references GB:M86923; NID:g164520; PID:g164521
#SIFICATION #superfamily beta-thromboglobulin
SUMMARY    #length 103 #molecular-weight 11633 #checksum 8835

Query Match      86.6%; Score 84; DB 2; Length 103;
Best Local Similarity 75.0%; Pred. No. 1.03e-05;
Matches          9; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Db      75 EVCLDPKPKWQ 86
QY      1 EICADPKKWKVQ 12

Search completed: Tue Mar 30 17:39:40 1999
Job time : 19 secs.

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WIRE

(TM)

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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Tue Mar 30 17:37:49 1999; Maspar time 2.32 Seconds
Tabular output not generated. 138.808 Million cell updates/sec

le: >US-08-927-939-1
Description: (1-12) from US08927939.pep
Perfect Score: 97
Sequence: 1 EICADPKQKVVQ 12

Scoring table: PAM 150
Gap 15

Searched: 74019 seqs, 26840295 residues

Post-processing: Minimum Match 0%
Listing first 45 summaries

Database: swiss-prot36
1:swissprot

Statistics: Mean 25.450; Variance 32.065; scale 0.794

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description	Pred. No.
1	97	100.0	99	1	MCPL_HUMAN	MONOCYTE CHEMOTACTIC P 2.70e-10
2	97	100.0	101	1	MCPL_CANFA	MONOCYTE CHEMOTACTIC P 2.70e-10
3	96	99.0	99	1	MCPL_PIG	MONOCYTE CHEMOTACTIC P 4.91e-10
4	94	96.9	99	1	MCPL_BOVIN	MONOCYTE CHEMOTACTIC P 1.61e-09
5	93	95.9	98	1	MCPL_HUMAN	MONOCYTE CHEMOTACTIC P 2.92e-09
6	92	94.8	99	1	MCPL_BOVIN	MONOCYTE CHEMOTACTIC P 5.26e-09
7	91	93.8	125	1	MCPL_RABIT	MONOCYTE CHEMOTACTIC P 9.47e-09
8	90	92.8	97	1	EOTA_RAT	EOTAXIN PRECURSOR (EOS 1.70e-08
9	90	92.8	97	1	EOTA_MOUSE	EOTAXIN PRECURSOR (EOS 1.70e-08
10	90	92.8	99	1	MCPL_HUMAN	MONOCYTE CHEMOTACTIC P 1.70e-08
11	89	91.8	97	1	EOTA_HUMAN	EOTAXIN PRECURSOR (EOS 3.05e-08
12	88	90.7	99	1	MCPL_PIG	MONOCYTE CHEMOTACTIC P 5.44e-08
13	88	90.7	120	1	MCPL_CAVPO	MONOCYTE CHEMOTACTIC P 5.44e-08
14	86	88.7	104	1	MCPL_MOUSE	MONOCYTE CHEMOTACTIC P 1.73e-07
15	84	86.6	96	1	EOTA_CAVPO	EOTAXIN PRECURSOR (EOS 5.42e-07
16	84	86.6	101	1	IL8_HUMAN	INTERLEUKIN-8 PRECURSOR 5.42e-07
17	84	86.6	101	1	IL8_SHEEP	INTERLEUKIN-8 PRECURSOR 5.42e-07
18	84	86.6	103	1	IL8_PIG	INTERLEUKIN-8 PRECURSOR 5.42e-07
19	83	85.6	92	1	MILA_RAT	MACROPHAGE INFLAMMATOR 9.58e-07
20	82	84.5	74	1	MCPL_BOVIN	MONOCYTE CHEMOTACTIC P 1.69e-06
21	82	84.5	99	1	MCPL_HUMAN	MONOCYTE CHEMOTACTIC P 1.69e-06
22	81	83.5	89	1	MIP4_HUMAN	MACROPHAGE INFLAMMATOR 2.96e-06
23	81	83.5	101	1	IL8_BOVIN	INTERLEUKIN-8 PRECURSOR 2.96e-06

24	81	83.5	101	1	IL8_RABIT	INTERLEUKIN-8 PRECURSOR 2.96e-06
25	80	82.5	148	1	MCPL_MOUSE	MONOCYTE CHEMOTACTIC P 5.18e-06
26	76	78.4	92	1	MIL1_MOUSE	MACROPHAGE INFLAMMATOR 4.73e-05
27	76	78.4	148	1	MCPL_RAT	MONOCYTE CHEMOTACTIC P 4.73e-05
28	75	77.3	89	1	SDF1_MOUSE	STROMAL CELL-DERIVED F 8.17e-05
29	75	77.3	93	1	SDF1_HUMAN	STROMAL CELL-DERIVED F 8.17e-05
30	75	77.3	97	1	MCPL_MOUSE	MONOCYTE CHEMOTACTIC P 8.17e-05
31	75	77.3	99	1	MCP3_MOUSE	MONOCYTE CHEMOTACTIC P 8.17e-05
32	75	77.3	101	1	IL8_CAVPO	INTERLEUKIN-8 PRECURSOR 8.17e-05
33	74	76.3	91	1	SISD_MOUSE	T-CELL SPECIFIC RANTES 1.40e-04
34	74	76.3	92	1	SISD_RAT	T-CELL SPECIFIC RANTES 1.40e-04
35	72	74.2	92	1	MIL1_HUMAN	MACROPHAGE INFLAMMATOR 4.11e-04
36	72	74.2	92	1	MIL2_HUMAN	MACROPHAGE INFLAMMATOR 4.11e-04
37	72	74.2	93	1	MIL3_HUMAN	MACROPHAGE INFLAMMATOR 4.11e-04
38	72	74.2	96	1	MIL4_HUMAN	MACROPHAGE INFLAMMATOR 4.11e-04
39	71	73.2	101	1	IL8_CERTO	INTERLEUKIN-8 PRECURSOR 6.99e-04
40	71	73.2	101	1	IL8_MACMU	INTERLEUKIN-8 PRECURSOR 6.99e-04
41	70	72.2	93	1	CCCL_HUMAN	CHEMOKINE CC-1 PRECURS 1.19e-03
42	70	72.2	109	1	CCC3_HUMAN	CHEMOKINE CC-3 PRECURS 1.19e-03
43	69	71.1	90	1	MILB_CHICK	MACROPHAGE INFLAMMATOR 2.00e-03
44	69	71.1	92	1	MILB_RABIT	MACROPHAGE INFLAMMATOR 2.00e-03
45	69	71.1	114	1	LTN_RAT	LYMPHOTACTIN PRECURSOR 2.00e-03

ALIGNMENTS

RESULT ID	MCPL_HUMAN	STANDARD	PRT	99 AA
AC	P13500			
DT	01-JAN-1990 (REL. 13, CREATED)			
DT	01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)			
DT	15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)			
DE	MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)			
DE	(MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HC11) (SMALL INDUCIBLE CYTOKINE A2).			
GN	SCY2 OR MCPL			
OS	HOMO SAPIENS (HUMAN)			
OC	EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;			
OC	EUTHERIA; PRIMATES.			
RN	(1)			
RP	SEQUENCE FROM N.A.			
RX	MEDLINE: 89153602			
RA	FURUTANI Y., NOMURA H., NOTAKE M., OYAMADA Y., FUKUI T., YAMADA M.,			
RA	LARSEN C.G., OPPENHEIM J.J., MATSUSHIMA K.;			
RL	BIOCHEM. BIOPHYS. RES. COMMUN. 159:249-255(1989).			
RN	(2)			
RP	SEQUENCE FROM N.A.			
RX	MEDLINE: 90097880			
RA	ROLLINS B.J., STIER P., ERNST T., WONG G.G.;			
RL	MOL. CELL. BIOL. 9:4687-4695(1989).			
RN	(3)			
RP	SEQUENCE FROM N.A.			
RX	MEDLINE: 89153605			
RA	YOSHIMURA T., YUHKI N., MOORE S.K., APPELLA E., LERMAN M.I.,			
RA	LEONARD E.J.;			
RL	FEBS LETT. 244:487-493(1989).			
RN	(4)			
RP	SEQUENCE FROM N.A.			
RX	MEDLINE: 90290466			
RA	SHY Y.J., LI Y.S., KOLATUKUDY P.E.;			
RL	BIOCHEM. BIOPHYS. RES. COMMUN. 169:346-351(1990).			
RN	(5)			
RP	SEQUENCE FROM N.A.			
RX	MEDLINE: 91207938			
RA	CHANG H.C., HSU F., FREEMAN G.J., GRIFFIN J.D., REINHERZ E.L.;			
RL	INT. IMMUNOL. 1:388-399(1989).			
RN	(6)			
RP	SEQUENCE FROM N.A.			
RX	MEDLINE: 94150478			
RA	LI Y.S., SHY Y.J., WRIGHT J.G., VALENTE A.J., CORNHILL J.F.,			
RA	KOLATUKUDY P.E.;			
RL	MOL. CELL. BIOCHEM. 126:61-68(1993).			

RN RP SEQUENCE FROM N.A.
 RX MEDLINE: 92095166.
 RA YOSHIMURA T., LEONARD E.J.;
 RL ADV. EXP. MED. BIOL. 305:47-56(1991).
 [8]
 RP SEQUENCE OF 24-99.
 RX MEDLINE: 89184525.
 RA ROBINSON E.A., YOSHIMURA T., LEONARD E.J., TANAKA S., GRIFFIN P.R.,
 RA SHABANOWITZ J., HUNT D.F., APPELLA E.;
 RL PROC. NATL. ACAD. SCI. U.S.A. 86:1850-1854(1989).
 [9]
 RP SEQUENCE OF 29-53 AND 82-92.
 RX MEDLINE: 90211336.
 RA DECOCK B., CONINGS R., LENAERTS J.-P., BILLAU A., VAN DAMME J.;
 RA BIOCHEM. BIOPHYS. RES. COMMUN. 167:904-909(1990).
 [10]
 RP 3D-STRUCTURE MODELLING.
 RX MEDLINE: 91312872.
 RA GROMENBORN A.M., CLORE G.M.;
 RA PROTEIN ENG. 4:263-269(1991).
 [11]
 RP X-RAY CRYSTALLOGRAPHY (1.85 ANGSTROMS).
 RX MEDLINE: 97143315.
 RA LUBKOWSKI J., BUJACZ G., DOMAILLE P.J., HANDEL T.M., WLODAWER A.;
 RL NAT. STRUCT. BIOL. 4:64-69(1997).
 [12]
 RP STRUCTURE BY NMR.
 RX MEDLINE: 96234959.
 RA HANDEL T.M., DOMAILLE P.J.;
 RL BIOCHEMISTRY 35:6569-6584(1996).
 [13]
 RP EFFECT OF DELETION OF N-TERMINAL RESIDUES.
 RX MEDLINE: 96193223.
 RA WEBER M., UGUCCIONI M., BAGGIOLINI M., CLARK-LEWIS I., DAHINDEN C.A.;
 RL J. EXP. MED. 183:681-685(1996).
 [14]
 RP MUTAGENESIS.
 RX MEDLINE: 94253189.
 RA ZHANG Y.-J., RUTLEDGE B.J., ROLLINS B.J.;
 RL J. BIOL. CHEM. 269:15918-15924(1994).
 [15]
 RP SUBUNIT.
 RX MEDLINE: 97053697.
 RA KIM K.-S., RAZARATHNAM K., CLARK-LEWIS I., SYKES B.D.;
 RL FEBS LETT. 395:277-282(1996).
 CC BUT NOT NEUTROPHILS OR EOSINOPHILS. AUGMENTS MONOCYTE ANTI-TUMOR
 CC ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES
 CC CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOID
 CC ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT
 CC OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
 CC ATHEROSCLEROSIS.
 CC
 CC -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
 CC -!- PTM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGET
 CC CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDUE CONVERTS
 CC IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT.
 CC
 CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC EMBL: M31626; G386961; -.
 CC EMBL: M30816; G386961; JOINED.
 CC EMBL: M31625; G386961; JOINED.
 CC EMBL: M24545; G307163; -.
 CC EMBL: M28226; G338009; -.
 CC EMBL: X14768; G34514; -.
 CC EMBL: M37719; G487124; -.
 CC EMBL: M28225; G338007; -.
 CC EMBL: M28223; G338007; JOINED.
 CC EMBL: M28224; G338007; JOINED.
 CC EMBL: S69738; G543465; -.
 CC EMBL: S71513; G240868; -.
 CC EMBL: A17786; G641145; -.
 CC PIR: A35474; A35474.

DR PIR: S03339; S03339.
 DR PDB: IDOK; 12-MAR-97.
 DR PDB: IDOL; 12-MAR-97.
 DR PDB: IDOM; 14-OCT-96.
 DR PDB: IDON; 14-OCT-96.
 DR PDB: IMCA; 15-OCT-94.
 DR MIM: 158105; -.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; 3D-STRUCTURE.
 FT SIGNAL 1 23
 FT CHAIN 24 99
 FT MOD_RES 24 24
 FT DISULFID 34 59
 FT DISULFID 35 75
 FT CARBOHYD 37 37
 FT VARIANT 76 76
 FT MUTAGEN 24 24
 FT MUTAGEN 25 32
 FT MUTAGEN 24 85
 FT MUTAGEN 24 91
 FT MUTAGEN 26 26
 FT MUTAGEN 29 29
 FT MUTAGEN 47 47
 FT MUTAGEN 50 50
 FT MUTAGEN 51 51
 FT MUTAGEN 53 53
 FT MUTAGEN 91 91
 SQ SEQUENCE 99 AA; 11025 MW; 5355B695 CRC32;
 Query Match 100.0%; Score 97; DB 1; Length 99;
 Best Local Similarity 100.0%; Pred. No. 2.70e-10;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 73 EICADPKOKKWQ 84
 QY 1 EICADPKOKKWQ 12
 RESULT 2
 ID MCP1_CANFA STANDARD; PRT: 101 AA.
 AC P52203;
 DT 01-OCT-1996 (REL. 34, CREATED)
 DT 01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
 DT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
 DE MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
 DE CHEMOATTRACTANT PROTEIN-1).
 GN SCY2 OR MCP1.
 OS CANIS FAMILIARIS (DOG).
 OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
 OC EUTHERIA; CARNIVORA.
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE-JUGULAR VEIN ENDOTHELIAL;
 RX MEDLINE: 97176620.
 RA KUMAR A.G., BALLANTYNE C.M., MICHAEL L.H., KUKIELKA G.L., YOURKER K.A.,
 RA LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J.,
 RA ROSSEN R.D., SMITH C.W., ENTMAN M.L.;
 RL CIRCULATION 95:693-700(1997).
 CC -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
 CC NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY
 CC REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYOCARDIUM.
 CC MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE
 CC REPERFUSED MYOCARDIUM.
 CC -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
 CC -!- INDUCTION: BY TNF-ALPHA.
 CC -!- TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULAR
 CC VEINS, AND INFILTRATING LEUKOCYTES.
 CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 CC EMBL: U29653; G1144186; -.
 DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
 KW CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
 FT SIGNAL 1 23 BY SIMILARITY.

FT CHAIN 24 101 MONOCYTE CHEMOTACTIC PROTEIN 1.
 FT MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID (BY
 FT SIMILARITY).
 FT DISULFID 34 59 BY SIMILARITY.
 FT DISULFID 35 75 BY SIMILARITY.
 SQ SEQUENCE 101 AA: 11121 NW: A7075B14 CRC32:

Query Match 100.0%; Score 97; DB 1; Length 101;
 Best Local Similarity 100.0%; Pred. No. 2.70e-10;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 73 EICADPKQKWQ 84
 QY 1 EICADPKQKWQ 12

RESULT 3
 ID MCP1_PIG STANDARD; PRT: 99 AA.
 AC P42831.
 DT 01-NOV-1995 (REL. 32, CREATED)
 DT 01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
 DT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
 DE MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
 GN SCYA2.
 OS SUS SCROFA (PIG).
 OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
 OC EUTHERIA; ARTIODACTYLA.
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE: 94183284.
 RA HOSANG K., KNOKE I., KLAUDINY J., WEMPE F., WUTTKE W., SCHEIT K.H.;
 RL BIOCHEM. BIOPHYS. RES. COMMUN. 199:962-968(1994).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC TISSUE-BRAIN;
 RA ZACH O.R.F.;
 RL SUBMITTED (JUL-1994) TO EMBL/GENBANK/DBJ DATA BANKS.
 CC -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
 CC NEUTROPHILS.
 CC -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
 CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 DR EMBL: X79416; G872313;
 DR EMBL: Z48479; G683717;
 DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
 KW CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
 FT CHAIN 1 23 BY SIMILARITY.
 FT MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID (BY
 FT SIMILARITY).
 FT DISULFID 34 59 BY SIMILARITY.
 FT DISULFID 35 75 BY SIMILARITY.
 SQ SEQUENCE 99 AA: 10976 MW: ECC3AFB4 CRC32:

Query Match 99.0%; Score 96; DB 1; Length 99;
 Best Local Similarity 91.7%; Pred. No. 4.91e-10;
 Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 73 EICAEPKQKWQ 84
 QY 1 EICADPKQKWQ 12

RESULT 4
 ID MCP2_BOVIN STANDARD; PRT: 99 AA.
 AC Q09141;
 DT 01-NOV-1995 (REL. 32, CREATED)
 DT 01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
 DT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
 DE MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
 DE CHEMOATTRACTANT PROTEIN 2).
 GN SCYA8 OR MCP2.
 OS BOS TAURUS (BOVINE).

OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
 OC EUTHERIA; ARTIODACTYLA.
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE: 94114084.
 RA WEMPE F., HANES J., SCHEIT K.H.;
 RL DNA CELL BIOL. 13:1-8(1994).
 CC -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES. THIS PROTEIN
 CC CAN BIND HEPARIN.
 CC -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
 CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 DR EMBL: S67954; E118856;
 DR EMBL: S67956; G544937;
 DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
 KW CYTOKINE; CHEMOTAXIS; SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE.
 FT SIGNAL 1 23 BY SIMILARITY.
 FT CHAIN 24 99 MONOCYTE CHEMOTACTIC PROTEIN 2.
 FT MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID (BY
 FT SIMILARITY).
 FT DISULFID 34 59 BY SIMILARITY.
 FT DISULFID 35 75 BY SIMILARITY.
 SQ SEQUENCE 99 AA: 10900 MW: 9BA2CD26 CRC32:

Query Match 96.9%; Score 94; DB 1; Length 99;
 Best Local Similarity 83.3%; Pred. No. 1.61e-09;
 Matches 10; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Db 73 DVCADPKQKWQ 84
 QY 1 EICADPKQKWQ 12

RESULT 5
 ID MCP4_HUMAN STANDARD; PRT: 98 AA.
 AC Q99616;
 DT 15-JUL-1998 (REL. 36, CREATED)
 DT 15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
 DT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
 DE MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE
 DE CHEMOATTRACTANT PROTEIN 4) (CK-BETA10) (NCC-1).
 GN SCYA13 OR MCP4 OR NCC1.
 OS HOMO SAPIENS (HUMAN).
 OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
 OC EUTHERIA; PRIMATES.
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=HEART;
 RX MEDLINE: 97113354.
 RA GARCIA-ZEPEDA E.A., COMBADIERE C., ROTHENBERG M.E., SARAFI M.N.,
 RA LAVIGNE F., HAMID Q., MURPHY P.M., LUSTER A.D.;
 RL J. IMMUNOL. 157:5613-5626(1996).
 RN [2]
 RP SEQUENCE FROM N.A., AND SEQUENCE OF 17-98.
 RC TISSUE=FETAL;
 RX MEDLINE: 96235049.
 RA UGUCCIONI M., LOETSCHER P., FORSMANN U., DEWALD B., LI H., LIMA S.H.,
 RA LI Y., KREIDER B., GAROTTA G., THELEN M., BAGGIOLINI M.;
 RL J. EXP. MED. 183:2379-2384(1996).
 RN [3]
 RP SEQUENCE FROM N.A., AND SEQUENCE OF 22-33.
 RC TISSUE=FETAL;
 RX MEDLINE: 97341179.
 RA BERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOUBAGY N.,
 RA APPELBAUM E., REAPE T.J., BRAUNER M., MAKWANA J., FOLEY J.J.,
 RA SCHMIDT D.B., IMBURGIA C., MACNULTY D., MATTHEWS J., O'DONNELL K.,
 RA O'SHANNESY D., SCOTT M., GROOT P.H.E., MACPHEE C.;
 RL J. BIOL. CHEM. 272:16404-16413(1997).
 RN [4]
 RP SEQUENCE FROM N.A.
 RA DANTE M., GIBSON A.;
 RL SUBMITTED (AUG-1997) TO EMBL/GENBANK/DBJ DATA BANKS.
 CC -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,

BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMATION. MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF ARTEROSCLEROSIS. MAY PLAY A ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO EXOGENOUS PATHOGENS.

-1- MASS SPECTROMETRY: MW=9314; MW_ERR=30; METHOD-MALDI; RANGE=17-98.

-1- MASS SPECTROMETRY: MW=8760; MW_ERR=30; METHOD-MALDI; RANGE=22-98.

-1- MASS SPECTROMETRY: MW=8575; MW_ERR=30; METHOD-MALDI; RANGE=24-98.

-1- INDUCTION: BY INTERLEUKIN-1 AND TNF-ALPHA.

-1- TISSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL INTESTINE, THYMUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. LOW LEVELS SEEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.

-1- THIS PROTEIN CAN BIND HEPARIN.

-1- PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 AND (FN)GLA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAVAGE.

(LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4.

-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).

EMBL: U46767; G173123; ..

EMBL: AC002482; G2340091; ..

MIN: 601391; ..

DR PROSITE: PS00472; SMALL CYTOKINES CC; 1.

KW CYTOKINE: CHEMOTAXIS; SIGNAL; GLYCOPROTEIN; INFLAMMATORY RESPONSE.

FT SIGNAL 1 23

FT CHAIN 24 98 MONOCYTE CHEMOTACTIC PROTEIN 4.

FT MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID.

FT DISULFID 34 58 BY SIMILARITY.

FT DISULFID 35 74 BY SIMILARITY.

FT CARBOHYD 29 29 POTENTIAL.

SEQUENCE 98 AA; 10986 MW; DF52F5EC CRC32;

Query Match 95.9%; Score 93; DB 1; Length 98;
Best Local Similarity 91.7%; Pred. No. 2.92e-09;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 72 EICADPKKQKWQ 83
Y 1 EICADPKKQKWQ 12

RESULT 6
ID MCPA_BOVIN STANDARD; PRT; 99 AA.
P28291;
01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
DE MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MCP-1) (ACIDIC SEMINAL FLUID PROTEIN).
DS BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
EUTHERIA; ARTIODACTYLA.
SEQUENCE FROM N.A.
RP TISSUE-SEMINAL PLASMA;
RC MEDLINE; 92096117;
XX WEMPE F., HENSCHEN A., SCHEIT K.H.;
RA DNA CELL BIOL. 10:671-679(1991).
[2]
SEQUENCE FROM N.A.
RP TISSUE-SEMINAL PLASMA;
RC MEDLINE; 92181448;
XX WEMPE F., EINSPIANIER R., SCHEIT K.H.;
RA BIOCHEM. BIOPHYS. RES. COMMUN. 183:232-237(1992).
[3]
SEQUENCE FROM N.A.
RP MEDLINE; 94338337;
XX WEMPE F., KUHLMANN J.K., SCHEIT K.H.;
RA BIOCHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994).
-1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS.
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE

C-C) (CHEMOKINE CC).

EMBL: L32659; G624394; ..

EMBL: M84602; G163395; ..

DR PIR: A39296; A39296.

DR PIR: JC2336; JC2336.

DR HSP: P13500; 1MCA.

DR PROSITE: PS00472; SMALL CYTOKINES CC; 1.

KW CYTOKINE: CHEMOTAXIS; SIGNAL.

FT SIGNAL 1 23 BY SIMILARITY.

FT CHAIN 24 99 MONOCYTE CHEMOTACTIC PROTEIN 1A.

FT MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).

FT DISULFID 34 59 BY SIMILARITY.

FT DISULFID 35 75 BY SIMILARITY.

SEQUENCE 99 AA; 11114 MW; C8F5821D CRC32;

Query Match 94.8%; Score 92; DB 1; Length 99;
Best Local Similarity 91.7%; Pred. No. 5.26e-09;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 73 EICADPKKQKWQ 84
Y 1 EICADPKKQKWQ 12

RESULT 7
ID MCP1_RABBIT STANDARD; PRT; 125 AA.
AC P28292;
01-DEC-1992 (REL. 24, CREATED)
DT 01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
DT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
DE MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
GN SCY2.

OS ORYCTOLAGUS CUNICULUS (RABBIT).

OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
OC EUTHERIA; LAGOMORPHA.
[1]
SEQUENCE FROM N.A.
RC STRAIN-NEW ZEALAND WHITE; TISSUE-SPLEEN;
RX MEDLINE; 91225489.
RA YOSHIMURA T., YUHKI N.;
RL J. IMMUNOL. 146:3483-3488(1991).
CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS.
CC -1- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
DR EMBL: M57440; G165470; ..
DR HSP: P13500; 1MCA.
DR PROSITE: PS00472; SMALL CYTOKINES CC; 1.

KW CYTOKINE: CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.

FT SIGNAL 1 23 BY SIMILARITY.

FT CHAIN 24 125 MONOCYTE CHEMOTACTIC PROTEIN 1.

FT MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).

FT DISULFID 34 59 BY SIMILARITY.

FT DISULFID 35 75 BY SIMILARITY.

FT CARBOHYD 40 40 POTENTIAL.

FT CARBOHYD 55 55 POTENTIAL.

FT CARBOHYD 112 112 POTENTIAL.

SEQUENCE 125 AA; 13776 MW; FBAC9D27 CRC32;

Query Match 93.8%; Score 91; DB 1; Length 125;
Best Local Similarity 100.0%; Pred. No. 9.47e-09;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 74 ICADPKKQKWQ 84
Y 2 ICADPKKQKWQ 12

RESULT 8
ID EOTA_RAT STANDARD; PRT; 97 AA.

P97545: 008780;
 15-JUL-1998 (REL. 36, CREATED)
 15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
 EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
 OS RATTUS NORVEGICUS (RAT).
 OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
 OC EUTHERIA; RODENTIA.
 [1]
 RN SEQUENCE FROM N.A.
 RA WILLIAMS C.M., NEWTON D.J., WILSON S.A., COLEMAN J.C.,
 RA FLANAGAN B.F.;
 RL SUBMITTED (DEC-1996) TO EMBL/GENBANK/DBJ DATA BANKS.
 [2]
 RN SEQUENCE FROM N.A.
 RC TISSUE=LUNG;
 RA ISHII Y.;
 RL SUBMITTED (MAY-1997) TO EMBL/GENBANK/DBJ DATA BANKS.
 CC -!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN
 CC DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINENT
 CC FEATURE OF ALLERGIC INFLAMMATORY REACTIONS (BY SIMILARITY).
 CC -!- SUBCELLULAR LOCATION: EXTRACELLULAR.
 CC -!- PTM: O-GLYCOSYLATED (PROBABLE).
 CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 DR EMBL: Y08358; E274141;
 DR EMBL: U96637; G2096785;
 DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
 KW EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
 KW INFLAMMATORY RESPONSE.
 FT SIGNAL 1 23 POTENTIAL.
 FT CHAIN 24 97 EOTAXIN.
 FT DISULFID 32 57 BY SIMILARITY.
 FT DISULFID 33 73 BY SIMILARITY.
 FT CARBOHYD 94 94 POTENTIAL.
 FT CONFLICT 3 3 L->S (IN REF. 2).
 SQ SEQUENCE 97 AA; 10851 MW; 05B4ED45 CRC32;
 Query Match 92.8%; Score 90; DB 1; Length 97;
 Best Local Similarity 91.7%; Pred. No. 1.70e-08;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Db 71 EICADPKKKVQ 82
 QY 1 EICADPKKKVQ 12
 RESULT 9
 ID EOTA_MOUSE STANDARD; PRT; 97 AA.
 AC P48298;
 U 01-FEB-1996 (REL. 33, CREATED)
 L 01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
 DE EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
 GN SCY11.
 OS MUS MUSCULUS (MOUSE).
 OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
 OC EUTHERIA; RODENTIA.
 [1]
 RN SEQUENCE FROM N.A.
 RA ROTHENBERG M.E., LUSTER A.D., LEDER P.;
 RC TISSUE=LUNG;
 RX MEDLINE: 96004658.
 RA ROTHENBERG M.E., LUSTER A.D., LEDER P.;
 RL PROC. NATL. ACAD. SCI. U.S.A. 92:8960-8964(1995).
 [2]
 RN SEQUENCE FROM N.A.
 RC STRAIN-C57BL/6J; TISSUE=LUNG;
 RX MEDLINE: 96158746.
 RA GONZALO J.-A., JIA G.-Q., AGUIRRE V., FRIEND D., COYLE A.J.,
 RA JENKINS N.A., LIN G.-S., KATZ H., LICHTMAN A., COPELAND N.G., KOPF M.,
 RA GUTIERREZ-RAMOS J.-C.;
 RL IMMUNITY 4:1-14(1996).
 CC -!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN

CC DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS (A PROMINENT
 CC FEATURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NOT
 CC LYMPHOCYTES, MACROPHAGES OR NEUTROPHILS.
 CC -!- SUBCELLULAR LOCATION: EXTRACELLULAR.
 CC -!- TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS.
 CC EXPRESSION INDUCIBLE IN THE LUNG (TYPE I ALVEOLAR EPITHELIAL
 CC CELLS), INTESTINE, HEART, SPLEEN, KIDNEY.
 CC -!- INDUCTION: BY INTERFERON-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
 CC -!- PTM: O-GLYCOSYLATED (PROBABLE).
 CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 CC C-C) (CHEMOKINE CC).
 DR EMBL: U26426; G995911;
 DR EMBL: U40672; G1113937;
 DR MGI: MGI:103576; SCY11.
 DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
 KW EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
 KW INFLAMMATORY RESPONSE.
 FT SIGNAL 1 23 POTENTIAL.
 FT CHAIN 24 97 EOTAXIN.
 FT DISULFID 32 57 BY SIMILARITY.
 FT DISULFID 33 73 BY SIMILARITY.
 SQ SEQUENCE 97 AA; 10893 MW; F85A96BC CRC32;
 Query Match 92.8%; Score 90; DB 1; Length 97;
 Best Local Similarity 91.7%; Pred. No. 1.70e-08;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Db 71 EICADPKKKVQ 82
 QY 1 EICADPKKKVQ 12
 RESULT 10
 ID MCP3_HUMAN STANDARD; PRT; 99 AA.
 AC P80098;
 DT 01-DEC-1992 (REL. 24, CREATED)
 DT 01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
 DT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
 DE MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3) (MONOCYTE
 DE CHEMOATTRACTANT PROTEIN 3) (NC28).
 GN SCY17 OR MCP3.
 OS HOMO SAPIENS (HUMAN).
 OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
 OC EUTHERIA; PRIMATES.
 [1]
 RN SEQUENCE FROM N.A., AND SEQUENCE OF 31-67 AND 71-99.
 RX MEDLINE: 93213290.
 RA OPDENAKKER G., FROYEN G., FITEN P., PROOST P., VAN DAMME J.;
 RL BIOCHEM. BIOPHYS. RES. COMMUN. 191:535-542(1993).
 [2]
 RN SEQUENCE FROM N.A.
 RX MEDLINE: 94375065.
 RA OPDENAKKER G., FITEN P., NYS G., FROYEN G., VAN ROY N., SPELEMAN F.,
 RA LAUREYS G., VAN DAMME J.;
 RL GENOMICS 21:403-408(1994).
 [3]
 RN SEQUENCE FROM N.A.
 RP MEDLINE: 93305913.
 RA MINTY A., CHALON P., GUILLEMOT J.C., KAGHAD M., LIAUZUN P.,
 RA MAGAZIN M., MILOUX B., MINTY C., RAMOND P., VITA N., LUPKER J.,
 RA SHIRE D., FERRARA P., CAPUT D.;
 RL EUR. CYTOKINE NETW. 4:99-110(1993).
 [4]
 RN SEQUENCE OF 30-99.
 RP TISSUE=OSTEOSARCOMA;
 RX MEDLINE: 92308855.
 RA VAN DAMME J., PROOST P., LENAERTS J.-P., OPDENAKKER G.;
 RL J. EXP. MED. 176:59-65(1992).
 [5]
 RN STRUCTURE BY NMR, AND SUBUNIT.
 RP MEDLINE: 97053697.
 RA KIM K.-S., RAGARATHNAM K., CLARK-LEWIS I., SYKES B.D.;
 RL FEBS LETT. 395:277-282(1996).


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RN  [6]
RP  STRUCTURE BY NMR.
RX  MEDLINE: 97263733.
RA  MEUNIER S., BERNASAU J.-M., GUILLEMOT J.-C., FERRARA P., DARBON H.;
RL  BIOCHEMISTRY 36:4412-4422(1997).
RC  FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND
CC  EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR
CC  ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS PROTEIN
CC  CAN BIND HEPARIN.
CC  -!- SUBUNIT: MONOMER.
CC  -!- PTM: O-GLYCOSYLATED.
CC  -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC  C-C) (CHEMOKINE CC).
DR  EMBL: X72308; G313708; ALT_INIT.
DR  EMBL: X72309; -; NOT_ANNOTATED_CDS.
DR  EMBL: X71087; G288399; -;
DR  EMBL: X71087; G288398; ALT_INIT.
DR  EMBL: X71087; G288397; ALT_INIT.
DR  PIR: JC1478; JC1478.
DR  PIR: S32222; S32222.
DR  PIR: A54678; A54678.
DR  PDB: INCV; 15-OCT-97.
DR  MIM: 138106; -;
DR  PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW  CYTOKINE; CHEMOTAXIS; HEPARIN-BINDING; GLYCOPROTEIN; SIGNAL;
KW  INFLAMMATORY RESPONSE; 3D-STRUCTURE.
FT  SIGNAL 1 23
FT  CHAIN 24 99 MONOCYTE CHEMOTACTIC PROTEIN 3.
FT  MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID.
FT  DISULFID 34 59 BY SIMILARITY.
FT  DISULFID 35 75 BY SIMILARITY.
FT  CARBOHYD 29 29 POTENTIAL.
FT  CONFLICT 30 30 T->K (IN REF. 4).
FT  CONFLICT 68 70 MISSING (IN REF. 4).
SQ  SEQUENCE 99 AA; 11200 MW; 7502E19C CRC32;

Query Match 92.8%; Score 90; DB 1; Length 99;
Best Local Similarity 91.7%; Pred. No. 1.70e-08;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 73 EICADPTQKWQ 84
Oy 1 EICADPKQKWQ 12

iT 11
EOTA_HUMAN STANDARD; PRT; 97 AA.
AC P51671; P50877; Q92490; Q92491;
DT 01-OCT-1996 (REL. 34, CREATED)
DT 01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
DT 01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
DE EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
CN SCVALL.
CS HOMO SAPIENS (HUMAN).
CC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
CC EUTHERIA; PRIMATES.
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE: 96181758.
RA GARCIA-ZEPEDA E.A., ROTHENBERG M.E., OWNBEY T.R., LEDER P.,
RA LUSTER A.D.;
KL NAT. MED. 2:449-456(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE: 96189937.
RA PONATH P.D., QIN S., RINGLER D.J., CLARK-LEWIS I., WANG J., KASSAM N.,
RA SMITH H., SHI X., GONZALO J.A., NEWMAN W., GUTIERREZ-RAMOS J.C.,
RA MACKAY C.R.;
PL J. CLIN. INVEST. 97:604-612(1996).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE-SMALL INTESTINE;
RX MEDLINE: 96205964.

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RA KITaura M., NAKAJIMA T., IMAI T., HARADA S., COMBADIERE C.,
RA TIFFANY H.L., MURPHY P.M., YOSHIE O.;
RL J. BIOL. CHEM. 271:7725-7730(1996).
RN [4]
RP SEQUENCE FROM N.A., SEQUENCE OF 60-65 AND 75-88, AND VARIANTS.
RC TISSUE-FORESKIN.
RX MEDLINE: 96374440.
RA BARTELS J., SCHLUETER C., RICHTER E., NOSO N., KULKE R.,
RA CHRISTOPHERS E., SCHROEDER J.M.;
RL BIOCHEM. BIOPHYS. RES. COMMUN. 225:1045-1051(1996).
RN [5]
RP SEQUENCE FROM N.A.
RC TISSUE-PLACENTA;
RX MEDLINE: 97312708.
RA GARCIA-ZEPEDA E.A., ROTHENBERG M.E., WEREMOWICZ S., SARAFI M.N.,
RA MORTON C.C., LUSTER A.D.;
RL GENOMICS 41:471-476(1997).
RN [6]
RP SEQUENCE FROM N.A.
RC TISSUE-LUNG;
RX MEDLINE: 97445071.
RA HEIN H., SCHLUETER C., KULKE R., CHRISTOPHERS E., SCHROEDER J.M.,
RA BARTELS J.;
RL BIOCHEM. BIOPHYS. RES. COMMUN. 237:537-542(1997).
CC -!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN
CC DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINENT
CC FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.
CC -!- SUBCELLULAR LOCATION: EXTRACELLULAR.
CC -!- PTM: O-GLYCOSYLATED (PROBABLE).
CC -!- INDUCTION: BY TNF-ALPHA, IL-1-ALPHA AND INTERFERON GAMMA.
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
DR  EMBL: U46573; G1280141; -;
DR  EMBL: U34780; G1183440; -;
DR  EMBL: D49372; G1552241; -;
DR  EMBL: 269291; E221070; -;
DR  EMBL: 275668; E251275; -;
DR  EMBL: 275669; E251258; -;
DR  EMBL: U46572; G208509; -;
DR  EMBL: 292709; E329504; -;
DR  MIN: 601156; -;
DR  PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW  EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
KW  INFLAMMATORY RESPONSE; POLYMORPHISM
FT  SIGNAL 1 23 POTENTIAL.
FT  CHAIN 24 97 EOTAXIN.
FT  DISULFID 32 57 BY SIMILARITY.
FT  DISULFID 33 73 BY SIMILARITY.
FT  VARIANT 7 7 L->P (IN CLONE 34).
FT  VARIANT 23 23 A->T (IN CLONE 53).
FT  VARIANT 51 51 R->S (IN CLONE 34).
FT  VARIANT 79 79 K->R (IN CLONE 53).
SQ  SEQUENCE 97 AA; 10732 MW; 6C0F3D98 CRC32;

Result Match 91.8%; Score 89; DB 1; Length 97;
Best Local Similarity 83.3%; Pred. No. 3.05e-08;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Db 71 DICADPPKKKWQ 82
Oy 1 EICADPKQKWQ 12

RESULT 12
ID MCP2_PIG STANDARD; PRT; 99 AA.
AC P49873;
DT 01-OCT-1996 (REL. 34, CREATED)
DT 01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
DT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
DE MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
DE CHEMOATTRACTANT PROTEIN 2).
CN SCY48 OR MCP2.
OS SUS SCROFA (PIG).

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OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
OC EUTHERIA; ARTIODACTYLA.
RN [1]
RP SEQUENCE FROM N.A.
PX MEDLINE: 95091716.
KA HOSANG K.K., KNOKE I.I., KLAUDINY J.J., WEMPE F.F., WUTTKE W.W.,
RA SCHEIT K.K.
RL BIOCHEM. BIOPHYS. RES. COMMUN. 205:148-153(1994).
CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES. THIS PROTEIN
CC CAN BIND HEPARIN.
CC -1- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC ENBL: 248480; G583719; .
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW CYTOKINE; CHEMOTAXIS; SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE.
RN [1]
FT SIGNAL 1 23 BY SIMILARITY.
FT CHAIN 24 99 MONOCYTE CHEMOTACTIC PROTEIN 2.
FT MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID (BY
FT SIMILARITY).
FT DISULFID 34 59 BY SIMILARITY.
FT DISULFID 35 75 BY SIMILARITY.
FT SEQUENCE 99 AA; 10903 MW; B7620BCF CRC32;

Query Match 90.7%; Score 88; DB 1; Length 99;
Best Local Similarity 83.3%; Pred. No. 5.44e-08;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Db 73 EVCADPQKQKWQ 84
I:||||| |||||
QY 1 EICADPKQKQKWQ 12

RESULT 13
ID MCP1_CAVPO STANDARD; PRT; 120 AA.
AC Q08782;
DT 01-NOV-1995 (REL. 32, CREATED)
DT 01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
DT 13-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
DE MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
DE CHEMOTACTIC PROTEIN-1).
GN SCY2 OR MCP1.
OS CAVIA PORCELLUS (GUINEA PIG).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
OC EUTHERIA; RODENTIA.
RN [1]
RP SEQUENCE FROM N.A.
PX STRAIN=2; TISSUE=SPLEEN;
RX MEDLINE: 93267104.
RA YOSHIMURA T.;
J. IMMUNOL. 150:5025-5032(1993).
CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
CC NEUTROPHILS.
CC -1- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC ENBL: L04985; G349821; .
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
RN [1]
FT SIGNAL 1 23 BY SIMILARITY.
FT CHAIN 24 120 MONOCYTE CHEMOTACTIC PROTEIN 1.
FT MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID (BY
FT SIMILARITY).
FT DISULFID 33 57 BY SIMILARITY.
FT DISULFID 34 73 BY SIMILARITY.
FT CARBOHYD 97 97 POTENTIAL.
FT SEQUENCE 120 AA; 13741 MW; 22FAD257 CRC32;

Query Match 90.7%; Score 88; DB 1; Length 120;
Best Local Similarity 83.3%; Pred. No. 5.44e-08;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Db 71 EVCADPTQKQKWQ 82

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QY 1 EICADPKQKQKWQ 12
I:||||| |||||

RESULT 14
ID MCP5_MOUSE STANDARD; PRT; 104 AA.
AC Q62401;
DT 01-NOV-1997 (REL. 35, CREATED)
DT 01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
DT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
DE MONOCYTE CHEMOTACTIC PROTEIN 5 PRECURSOR (MCP-5) (MCP-1 RELATED
DE CHEMOKINE).
GN SCY12 OR MCP5.
OS MUS MUSCULUS (MOUSE).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
OC EUTHERIA; RODENTIA.
RN [1]
RP SEQUENCE FROM N.A.
PX JIA G.-Q., GONZALO J.A., LLOYD C., KREMER L., LU L., MARTINEZ A.C.,
RX MEDLINE: 97079149.
RA WERSHIL B.K., GUTIERREZ-RAMOS J.C.;
RA J. EXP. MED. 184:1939-1951(1996).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE: 97149438.
RA SARAFI M.N., GARCIA-ZEPEDA E.A., MACLEAN J.A., CHARO I.F.,
RA LUSTER A.D.;
J. EXP. MED. 185:99-109(1997).
CC -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES,
CC AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTE ACTIVE
CC CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC
CC INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A
CC PIVOTAL ROLE DURING EARLY STAGES OF ALLERGIC LUNG INFLAMMATION.
CC -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
CC -1- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND
CC THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES,
CC BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.
CC -1- INDUCTION: BY IFN-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
CC -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC C-C) (CHEMOKINE CC).
CC ENBL: U50712; G1477582; .
DR EMBL: U66670; G1881583; .
DR MGI:108224; SCY12.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
RN [1]
FT SIGNAL 1 22 BY SIMILARITY.
FT CHAIN 23 104 MONOCYTE CHEMOTACTIC PROTEIN 5.
FT DISULFID 33 58 BY SIMILARITY.
FT DISULFID 34 74 BY SIMILARITY.
FT SEQUENCE 104 AA; 11659 MW; 08FA6C35 CRC32;

Query Match 88.7%; Score 86; DB 1; Length 104;
Best Local Similarity 90.9%; Pred. No. 1.73e-07;
Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 72 EICADPKQKQKWQ 82
I:||||| |||||
QY 1 EICADPKQKQKWQ 11

RESULT 15
ID EOTA_CAVPO STANDARD; PRT; 96 AA.
AC P80325;
DT 01-JUN-1994 (REL. 29, CREATED)
DT 01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
DT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
DE EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
GN SCY11.
OS CAVIA PORCELLUS (GUINEA PIG).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
OC EUTHERIA; RODENTIA.
RN [1]
RP SEQUENCE FROM N.A.

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RC TISSUE=LUNG;
RX MEDLINE: 95173589.
RA ROTHENBERG M.E.; LUSTER A.D., LILLY C.M., DRAZEN J.M., LEDER P.;
RL J. EXP. MED. 181:1211-1216(1995).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE: 95091818.
RA JOSE P.J., ADCOCK I.M., GRIFFITHS-JOHNSON D.A., BERKMAN N.,
RA WELLS T.C., WILLIAMS T.J., POWER C.A.;
RL BIOCHEM. BIOPHYS. RES. COMMUN. 205:788-794(1994).
RN [3]
RP SEQUENCE OF 24-96.
RC STRAIN-HARTLEY; TISSUE=LUNG;
RX MEDLINE: 94157409.
RA JOSE P.J., GRIFFITHS-JOHNSON D.A., COLLINS P.D., WALSH D.T.,
RA MOQUEL R., TOTTY N.F., TRUONG O., HSUAN J.J., WILLIAMS T.J.;
J. EXP. MED. 179:881-887(1994).
-!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN
DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINENT
FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.
CC -!- SUBCELLULAR LOCATION: EXTRACELLULAR.
CC -!- TISSUE SPECIFICITY: LUNG.
CC -!- PTM: O-GLYCOSYLATED (PROBABLE).
CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
JR EMBL: U18941; G687656;
JR EMBL: X77603; G602552;
LR HSP: P13500; IMCA.
YR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
YR EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
KW INFLAMMATORY RESPONSE.
FT SIGNAL 1 23
FT CHAIN 24 96 EOTAXIN.
FT DISULFID 31 56 BY SIMILARITY.
FT DISULFID 32 72 BY SIMILARITY.
FT CARBOHYD 93 93 POTENTIAL.
FT CONFLICT 88 88 D -> G (IN REF. 2).
SQ SEQUENCE 96 AA; 10753 MW; DD28C7E5 CRC32;

Query Match 86.8%; Score 84; DB 1; Length 96;
Best Local Similarity 90.9%; Pred. No. 5.42e-07;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 71 ICADPKKKVQ 81
2 ICADPKQKWQ 12

Search completed: Tue Mar 30 17:37:56 1999.
Job time : 7 secs.

(M)

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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

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Run on: Tue Mar 30 17:38:14 1999; MasPar time 4.94 Seconds
134.090 Million cell updates/sec
Tabular output not generated.
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.e:
Description:
Perfect Score: 97
Sequence: 1 EICADPKQKWWQ 12
>US-08-927-939-1
(1-12) from US08927939.pep

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Scoring table: PAM 150
Gap 15

Searched: 180763 seqs, 55169189 residues

Post-processing: Minimum Match 0%
Listing first 45

Database: sptrembl18

1:sp-archaea 2:sp-bacteria 3:sp-fungi 4:sp-human
5:sp-invertebrate 6:sp-mammal 7:sp-mhc 8:sp-organelle
9:sp-phage 10:sp-plant 11:sp-rodent 12:sp-unclassified
13:sp-vertebrate 14:sp-virus

Statistics: Mean 25.510; Variance 35.092; scale 0.727

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Alt No.	Score	Query		Length	DB	ID	Description	Pred. No.
		Match						
1	81	83.5	395	11		Q35933	FRACTALINE.	4.53e-05
2	81	83.5	395	11		Q35188	NEUROTACTIN..	4.53e-05
3	77	79.4	119	4		Q00175	MPF1-2.	3.48e-04
4	76	78.4	97	11		Q80993	CC CHEMOKINE ST38 PREC	5.76e-04
5	76	78.4	134	4		Q00585	BETA CHEMOKINE EXODUS-	5.76e-04
6	75	77.3	92	11		Q88430	CC CHEMOKINE ABCD-1	9.50e-04
7	73	75.3	97	13		Q57411	LYMPHOTACTIN PRECURSOR	2.56e-03
8	72	74.2	80	4		Q14745	LD78 ALPHA BETA PRECUR	4.19e-03
9	72	74.2	95	4		Q99564	CHEMOKINE EXODUS.	4.19e-03
10	72	74.2	96	11		P97884	CHEMOKINE EXODUS.	4.19e-03
11	70	72.2	120	4		Q15467	IL-10-INDUCIBLE CHEMOK	1.11e-02
12	69	71.1	101	13		Q93238	CC CHEMOKINE-1.	1.79e-02
13	68	70.1	91	4		Q43846	RANTES PRECURSOR.	2.89e-02
14	68	70.1	97	6		Q62812	INTERLEUKIN-8 (FRAGMEN	2.89e-02
15	67	69.1	95	14		Q98158	ORF K6.	4.65e-02
16	67	69.1	109	11		Q55038	B LYMPHOCYTE CHEMOATTR	4.65e-02
17	67	69.1	397	4		P78423	CX3C CHEMOKINE PRECURS	4.65e-02
18	66	68.0	97	4		Q00626	MACROPHAGE-DERIVED CHE	7.45e-02
19	66	68.0	133	11		Q09002	BETA CHEMOKINE EXODUS-	7.45e-02
20	66	68.0	133	11		Q09002	SMALL INDUCIBLE CTYKI	7.45e-02

21	64	56.0	760	3	Q99126	CHITIN SYNTHETASE I	1.89e+01
22	60	61.9	109	4	Q43327	CXC CHEMOKINE PRECURSOR	1.16e+00
23	59	60.8	187	2	O83516	HYPOTHETICAL 21.4 KD P	1.80e+00
24	59	60.8	203	14	D67634	ECO Q PROTEIN (FRAGMEN	1.80e+00
25	59	60.8	399	14	O68409	ORF UL154	1.80e+00
26	58	59.8	982	5	Q93390	HYPOTHETICAL PROTEIN C	2.79e+00
27	58	59.8	1053	3	O84834	RIBONUCLEOSIDE REDUCTA	2.79e+00
28	57	58.8	108	11	Q70460	EBI-1 LIGAND CHEMOKINE	4.30e+00
29	57	58.8	192	10	D23536	RESISTANCE GENE HOMOLO	4.30e+00
30	57	58.8	859	14	Q79013	ENVELOPE GLYCOPROTEIN	4.30e+00
31	57	58.8	1224	5	P91309	CODED FOR BY C. ELEGAN	4.30e+00
32	57	58.8	1361	10	O04264	DOWNY MILDEW RESISTANC	4.30e+00
33	56	57.7	104	13	Q73912	K60 PROTEIN PRECURSOR.	6.50e+00
34	56	57.7	552	5	O61090	SERINE RICH PROTEIN HO	6.50e+00
35	56	57.7	552	5	O46178	RADIAL SPOKEHEAD.	6.50e+00
36	55	56.7	145	2	P74671	HYPOTHETICAL 16.6 KD P	1.01e+01
37	55	56.7	248	10	O81404	1-AMINOCYCLOPROPANE-1-	1.01e+01
38	55	56.7	307	10	O65737	BETA-GALACTOSIDASE [EC	1.01e+01
39	55	56.7	350	3	O60151	CHROMOSOME XII COSMID	1.01e+01
40	55	56.7	397	3	Q12123	O3635P.	1.01e+01
41	55	56.7	466	10	O82719	ACC SYNTHASE (EC 4.4.1	1.01e+01
42	55	56.7	491	10	Q43747	1-AMINOCYCLOPROPANE-1-	1.01e+01
43	55	56.7	497	10	Q42610	1-AMINOCYCLOPROPANE-1-	1.01e+01
44	55	56.7	730	10	O65736	BETA-GALACTOSIDASE [EC	1.01e+01
45	54	55.7	172	2	O51136	H1054 HOMOLOG (FRAGME	1.53e+01

ALIGNMENTS

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RESULT      1
IID O35933 PRELIMINARY; PRT; 395 AA.
AAC O35933;
01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JUN-DT DTDT 01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-JAN-DT DTDT 01-JAN-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DE FRACTALKINE.
DO MUS MUSCULUS (MOUSE).
OOC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
OOC SCURIOGNATHI; MURIDAE; MURINAE; MUS.
RN [1]
RPN SEQUENCE FROM N.A.
RRP STRAIN-BALB/C; TISSUE-BRAIN;
RRC ROSSI D., HARDMAN G., COPELAND N., GILBERT D.J., JENKINS N.,
RRA ZLOTNIK A., BAZAN J.F.;
RRA SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
RRL EMBL; U92565; G2459677; -
RDL PFAM; PF00048; i18; 1.
RSQ SEQUENCE 395 AA; 3997A113 CRG32;

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Query Match 83.5%; Score 81; DB 11; Length 395;
Best Local Similarity 81.8%; Pred. No. 4.53e-05;
Matches 9; Conservative 2; Mismatches 0; Indels 0; Gaps 0

RESULT 2
ID 035188
PRELIMINARY:
PRT: 395 AA.

03J180. (TREMELREL. 05, CREATED)
01-JAN-1998 (TREMELREL. 05, LAST SEQUENCE UPDATE)
01-JAN-1998 (TREMELREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMELREL. 08, LAST ANNOTATION UPDATE)
NEUROFACIN.
SCYD1.
MUS MUSCULUS (MOUSE).
EURARCTO; RETRZA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCHIROGNATHI; MURIDAE; MURINAE; MUS.
[1]
SEQUENCE FROM N.A.
MEDLINE; 97320499.
PAN Y.; CLARE L.; HONG Z.; DOLICH S.; DEEDS J.; GONZALO J.; VATH J.

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RA GOSSELIN M., MA J., DUSSAULT B., WOOLF B., ALPERIN A., CULPEPPER J.,
.. CHIERREZ-RAMOS J.C., GEARING D.;
.. "Neurotactin, a membrane-anchored chemokine upregulated in brain
.. inflammation."
RL NATURE 387:611-617(1997).
DR EMBL: AF010586; G2317698; -.
DR MGD: MGI:1097153; SCYDL.
DR PFAM: PF00048; 118; 1.
SQ SEQUENCE 395 AA; 42098 MW; E3CD0612 CRC32;

Query Match 83.5%; Score 81; DB 11; Length 395;
Best Local Similarity 81.8%; Pred. No. 4.53e-05;
Matches 9; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Db 73 FCADPKKQWQ 83
:|||||:
2 ICADPKQKQWQ 12

RESULT 3
ID O00175 PRELIMINARY; PRT; 119 AA.
AC O00175;
DT 01-JUL-1997 (TREMBLREL. 04, CREATED)
DT 01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DE MP1F-2.
OS HOMO SAPIENS (HUMAN).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
OC CATARRHINI; HOMINIDAE; HOMO.
RN [1]
RP SEQUENCE FROM N.A.
RA PATEL V.P., KREIDER B.L., LI Y., LI H., LEUNG K., SALCEDO T.,
RA NARDELLI B., PIPALLA V., GENTZ S., THOTAKURA R., PARMELEE D.,
RA GENTZ R., GAROTTA G.;
RL J. EXP. MED. 0:0-0(0).
DR EMBL: U85768; G1916252; -.
DR PFAM: PF00048; 118; 1.
SQ SEQUENCE 119 AA; 13119 MW; CDF526F0 CRC32;

Query Match 79.4%; Score 77; DB 4; Length 119;
Best Local Similarity 66.7%; Pred. No. 3.48e-04;
Matches 8; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Db 72 QFCGDPKQEWQ 83
:|||||:
1 EICADPKQKQWQ 12

RESULT 4
ID O89093 PRELIMINARY; PRT; 97 AA.
AC O89093;
DT 01-NOV-1998 (TREMBLREL. 08, CREATED)
DT 01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DE CC CHEMOKINE ST38 PRECURSOR.
GN LARC.
OS MUS MUSCULUS (MOUSE).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
OC RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
RN [1]
RP SEQUENCE FROM N.A.
RA UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
RA LESSLAUER W.;
RT "A novel rat CC chemokine, identified by targeted differential
RT display, is upregulated in brain inflammation."
RL J. NEUROIMMUNOL. 0:0-0(1998).
RN [2]
RP SEQUENCE FROM N.A.
RA VILLARES R.;
.. SUBMITTED (JUL-1998) TO EMBL/GENBANK/DBJ DATA BANKS.
.. EMBL: AF053313; G3551819; -.
.. EMBL: AJ007862; E1312757; -.
.. SIGNAL.
KW

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FT SIGNAL 1 27 POTENTIAL.
FT CHAIN 28 97 CC CHEMOKINE ST38.
SQ SEQUENCE 97 AA; 10826 MW; 053405BD CRC32;

Query Match 78.4%; Score 76; DB 11; Length 97;
Best Local Similarity 80.0%; Pred. No. 5.76e-04;
Matches 8; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Db 74 VCADPKQKQWV 83
:|||||:
2 ICADPKQKQWV 11

RESULT 5
ID O00585 PRELIMINARY; PRT; 134 AA.
AC O00585;
DT 01-JUL-1997 (TREMBLREL. 04, CREATED)
DT 01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DE BETA CHEMOKINE EXODUS-2.
OS HOMO SAPIENS (HUMAN).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
OC CATARRHINI; HOMINIDAE; HOMO.
RN [1]
RP SEQUENCE FROM N.A.
RA HROMAS R.A., GRAY P., KLEMSZ M., FIFE K., BROXMEYER H.;
RL SUBMITTED (JUN-1997) TO EMBL/GENBANK/DBJ DATA BANKS.
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE; 97400322.
RA HEDRICK J.A., ZLOTNIK A.;
RT Identification and characterization of a novel beta chemokine
RT containing six conserved cysteines.
RL J. IMMUNOL. 159:1589-1593(1997).
RN [3]
RP SEQUENCE FROM N.A.
RA HEDRICK J.A., ZLOTNIK A.;
RL SUBMITTED (MAY-1997) TO EMBL/GENBANK/DBJ DATA BANKS.
RN [4]
RP SEQUENCE FROM N.A.
RA NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA M., TAKAGI S.,
RA NISHIMURA M., KAKIZAKI M., NOMIYAMA H., YOSHIE O.;
RL SUBMITTED (AUG-1997) TO EMBL/GENBANK/DBJ DATA BANKS.
DR EMBL: U88320; G2196920; -.
DR EMBL: AF001979; G2624925; -.
DR EMBL: AB002409; D1022673; -.
DR PFAM: PF00048; 118; 1.
SQ SEQUENCE 134 AA; 14646 MW; FE86A239 CRC32;

Query Match 78.4%; Score 76; DB 4; Length 134;
Best Local Similarity 75.0%; Pred. No. 5.76e-04;
Matches 9; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Db 73 ELCADPKELWQV 84
:|||||:
1 EICADPKQKQWQ 12

RESULT 6
ID O88430 PRELIMINARY; PRT; 92 AA.
AC O88430;
DT 01-NOV-1998 (TREMBLREL. 08, CREATED)
DT 01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DE CC CHEMOKINE ABCD-1.
OS MUS MUSCULUS (MOUSE).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
OC RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
RN [1]
RP SEQUENCE FROM N.A.
RA TISSUE-LIVER;
RX MEDLINE; 98353531.
RA SCHANIEL C., PARDALI E., SALLUSTO F., SPELETAS M., RUEDL C.,

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RA SHIMIZU T., SEIDL T., ANDERSSON J., MELCHERS F., ROLINK A.G.,
 RA SIDERAS P.;
 RT Activated murine B lymphocytes and dendritic cells produce a novel
 RT CC chemokine which acts selectively on activated T cells.;
 RL J. EXP. MED. 188:451-463(1998).
 DR EMBL: AF052505; G3378116; -;
 SQ SEQUENCE 92 AA; 10302 MW; BC7219A0 CRC32;

Query Match 77.3%; Score 75; DB 11; Length 92;
 Best Local Similarity 72.7%; Pred. No. 9.50e-04;
 Matches 8; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Db 74 DICADPROVWV 84
 QY 1 EICADPKQKW 11

RESULT 7
 ID O57411 PRELIMINARY; PRT; 97 AA.
 AC O57411;
 DT 01-JUN-1998 (TREMBLREL. 06, CREATED)
 DT 01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
 DT 01-JUN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE)
 DE LYMPHOTACTIN PRECURSOR.
 OS GALLUS GALLUS (CHICKEN).
 OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
 OC NEOGNATHAE; GALLIFORMES; PHASIANIDAE; PHASIANINAE; GALLUS.
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=SPLEEN;
 RA ROSSI D.L., BAZAN J.F., ZLOTNIK A.;
 RL SUBMITTED (JUN-1997) TO EMBL/GENBANK/DBJ DATA BANKS.
 DR EMBL: AF006742; G2827882; -;
 SQ SEQUENCE 97 AA; 11131 MW; 3290101C CRC32;

Query Match 75.3%; Score 73; DB 13; Length 97;
 Best Local Similarity 72.7%; Pred. No. 2.56e-03;
 Matches 8; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Db 72 ICVHPEOKWQV 82
 QY 2 ICADPKQKWQ 12

RESULT 8
 ID Q14745 PRELIMINARY; PRT; 80 AA.
 AC Q14745;
 DT 01-NOV-1996 (TREMBLREL. 01, CREATED)
 DT 01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
 DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
 DE LD78 ALPHA BETA PRECURSOR (FRAGMENT).
 OS HOMO SAPIENS (HUMAN).
 OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
 OC CATARRHINI; HOMINIDAE; HOMO.
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=BRAIN;
 RA ISHIZUKA K., IGATA-YI R., NARUSE K., NAKASHIMA H., OHUCHI K.,
 RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MIURA R.,
 RA MIYAKAWA T.;
 RL SUBMITTED (AUG-1995) TO EMBL/GENBANK/DBJ DATA BANKS.
 DR EMBL: D63785; G961440; -;
 DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
 DR PFAM: PF00048; i18; 1.
 KW SIGNAL.
 FT NON_TER 1 16 POTENTIAL.
 FT SIGNAL <1 16
 FT CHAIN 17 >80 LD78 ALPHA BETA.
 FT NON_TER 80 80
 SQ SEQUENCE 80 AA; 8857 MW; 3F87F1C6 CRC32;

Query Match 74.2%; Score 72; DB 4; Length 80;
 Best Local Similarity 58.3%; Pred. No. 4.19e-03;
 Matches 7; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Db 65 QVCADPSEEWVQ 76
 QY 1 EICADPKQKWQ 12

RESULT 9
 ID Q99664 PRELIMINARY; PRT; 95 AA.
 AC Q99664;
 DT 01-MAY-1997 (TREMBLREL. 03, CREATED)
 DT 01-MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
 DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
 DE CHEMOKINE EXODUS.
 OS HOMO SAPIENS (HUMAN).
 OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
 OC CATARRHINI; HOMINIDAE; HOMO.
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE-PANCREAS;
 RX MEDLINE: 97275143.
 RA HROMAS R., GRAY P.W., CHANTRY D., GODISKA R., KRATHWOHL M., FIFE K.,
 RA BELL G.I., TAKEDA J., ARONICA S., GORDON M., COOPER S., BROXMEYER H.E.,
 RA KLEMSZ M.J.;
 RT Cloning and characterization of exodus, a novel beta-chemokine.;
 RL BLOOD 89:3315-3322(1997).
 DR EMBL: U64197; G1778717; -;
 DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
 DR PFAM: PF00048; i18; 1.
 SQ SEQUENCE 95 AA; 10691 MW; 152654C0 CRC32;

Query Match 74.2%; Score 72; DB 4; Length 95;
 Best Local Similarity 70.0%; Pred. No. 4.19e-03;
 Matches 7; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Db 72 VCANPKQTVW 81
 QY 2 ICADPKQKW 11

RESULT 10
 ID P97884 PRELIMINARY; PRT; 96 AA.
 AC P97884;
 DT 01-MAY-1997 (TREMBLREL. 03, CREATED)
 DT 01-MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
 DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
 DE CC CHEMOKINE EXODUS.
 OS RATTUS NORVEGICUS (RAT).
 OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
 OC SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=SPRAGUE-DAWLEY;
 RA KELLER G.S., MACIEJEWSKI-LENOIR D., LEE E.D., MAKI R.A.;
 RL SUBMITTED (FEB-1997) TO EMBL/GENBANK/DBJ DATA BANKS.
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=FISHER 344; TISSUE=BRAIN;
 RA UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
 RA LESSLAUER W.;
 RT "A novel rat CC chemokine, identified by targeted differential
 RT display, is upregulated in brain inflammation.";
 RL J. NEUROIMMUNOL. 0:0-0(1998).
 DR EMBL: U90447; G1899246; -;
 DR EMBL: AF053312; G3551817; -;
 DR PFAM: PF00048; i18; 1.
 KW SIGNAL.
 SQ SEQUENCE 96 AA; 10875 MW; 3FC09DD8 CRC32;

Query Match 74.2%; Score 72; DB 11; Length 96;

Best Local Similarity 80.0%; Pred. No. 4.19e-03;
Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Db 73 VCADPKQIHW 82
:|||||
Qy 2 ICADPKQKW 11

RESULT 11
ID O15467 PRELIMINARY: PRT: 120 AA.
AC O15467;
DT 01-JAN-1998 (TREMBLREL. 05, CREATED)
DT 01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DE IL-10-INDUCIBLE CHEMOKINE.
GN ILINCK OR SCYAL6.
OS HOMO SAPIENS (HUMAN).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
OC CATARRHINI; HOMINIDAE; HOMO.
RN [1]
RP SEQUENCE FROM N.A.
RA HEDRICK J.A., HELMS A., GORMAN D., ZLOTNIK A.;
RL SUBMITTED (NOV-1997) TO EMBL/GENBANK/DBJ DATA BANKS.
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=LIVER;
RA SHODAI K., HIESHIMA K., FUKUDA S., IIO M., MIURA R., IMAI T.,
RA YOSHIE O., NOMIYAMA H.;
RL BIOCHIM. BIOPHYS. ACTA 0:0-0(1998).
RN [3]
RP SEQUENCE FROM N.A.
RA NOMIYAMA H.;
RL "Structure of a region of 181 kb containing five CC chemokine genes.";
RL SUBMITTED (AUG-1998) TO EMBL/GENBANK/DBJ DATA BANKS.
RN [4]
RP SEQUENCE FROM N.A.
RX MEDLINE: 98308096.
RA YOUNG B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR.,
RA HANGOC G., KWON B.S.;
RT "Isolation and characterization of LMC, a novel lymphocyte and
RT monocyte chemoattractant human CC chemokine, with myelosuppressive
RT activity.";
RL BIOCHEM. BIOPHYS. RES. COMMUN. 247:217-222(1998).
DR EMBL: U91746; G2581781;
DR EMBL: AB007454; D1024963;
DR EMBL: AF088219; G3719385;
DR EMBL: AF053467; G3395776;
DR PFAM: PF00048; I18; 1.
KW SIGNAL.
SQ SEQUENCE 120 AA; 13600 MW; A079DF66 CRC32;

Query Match 72.2%; Score 70; DB 4; Length 120;
Best Local Similarity 50.0%; Pred. No. 1.11e-02;
Matches 6; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

Db 74 EVCINPNDWVQ 85
:|||||
Qy 1 ICADPKQKW 12

RESULT 12
ID O93238 PRELIMINARY: PRT: 101 AA.
AC O93238;
DT 01-NOV-1998 (TREMBLREL. 08, CREATED)
DT 01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DE CC CHEMOKINE-1.
OS CYPRINUS CARPIO (COMMON CARP).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ACTINOPTERYGII; NEOPTERYGII;
OC TELEOSTEI; EUTELEOSTEI; OSTARIOPHYSI; CYPRINIFORMES; CYPRINOIDEA;
OC CYPRINIDAE; CYPRININAE; CYPRINUS.
RN [1]
RP SEQUENCE FROM N.A.

RA FUJIKI K., NAKAO M., SHIN D., YANO T.;
RT "CDNA cloning of a carp CC chemokine homologous to mammalian
RT eotaxins.";
RL SUBMITTED (JAN-1998) TO EMBL/GENBANK/DBJ DATA BANKS.
DR EMBL: AB010469; D1032417;
SQ SEQUENCE 101 AA; 11266 MW; 9CFBD540 CRC32;

Query Match 71.1%; Score 69; DB 13; Length 101;
Best Local Similarity 53.6%; Pred. No. 1.79e-02;
Matches 7; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Db 72 EFCSDPKLRWV 82
:|||||
Qy 1 EICADPKQKW 11

RESULT 13
ID O43646 PRELIMINARY: PRT: 91 AA.
AC O43646;
DT 01-JUN-1998 (TREMBLREL. 06, CREATED)
DT 01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DE RANTES PRECURSOR.
GN SCYAS.
OS HOMO SAPIENS (HUMAN).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
OC CATARRHINI; HOMINIDAE; HOMO.
RN [1]
RP SEQUENCE FROM N.A.
RA JANG J.S., KIM B.E.;
RL SUBMITTED (JAN-1998) TO EMBL/GENBANK/DBJ DATA BANKS.
RN [2]
RP SEQUENCE FROM N.A.
RA NOMIYAMA H.;
RL "Structure of a region of 181 kb containing five CC chemokine genes.";
RL SUBMITTED (AUG-1998) TO EMBL/GENBANK/DBJ DATA BANKS.
DR EMBL: AF043341; G2905632;
DR EMBL: AF088219; G3719366;
DR PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
KW SIGNAL.
FT CHAIN 1 23 POTENTIAL.
FT SIGNAL 24 91 RANTES.
SQ SEQUENCE 91 AA; 9990 MW; CF404FAD CRC32;

Query Match 70.1%; Score 68; DB 4; Length 91;
Best Local Similarity 50.0%; Pred. No. 2.89e-02;
Matches 6; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Db 71 QVCANPEKKWVR 82
:|||||
Qy 1 EICADPKQKWQ 12

RESULT 14
ID O62812 PRELIMINARY: PRT: 97 AA.
AC O62812;
DT 01-AUG-1998 (TREMBLREL. 07, CREATED)
DT 01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
DT 01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
DE INTERLEUKIN-8 (FRAGMENT).
GN IL-8.
OS EQUUS CABALLUS (HORSE).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
OC PERISSODACTYLA; EQUIDAE; EQUUS.
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=BRONCHOALVEOLAR TISSUE;
RA FRANCHINI M.;
RL SUBMITTED (APR-1998) TO EMBL/GENBANK/DBJ DATA BANKS.
DR EMBL: AF062377; G3126973;
FT NON_TER 97
SQ SEQUENCE 97 AA; 10742 MW; 00396FBF CRC32;

Query Match 70.1% Score 68; DB 6; Length 97;
 Best Local Similarity 58.3%; Pred. No. 2.89e-02;
 Matches 7; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

DB 75 EVCNPHTRKWQ 86
 QY 1 EICADPKQKWQ 12

QY 1 EICADPKQKWQ 12

Search completed: Tue Mar 30 17:39:03 1999
 Job time : 49 secs.

RESULT 15
 ID Q98158 PRELIMINARY; PRT; 95 AA.
 AC Q98158; 012569;
 DT 01-FEB-1997 (TREMBLREL. 02, CREATED)
 DT 01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
 DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
 DE ORF K6.
 OS KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS.
 OC VIRUSES; DSDNA VIRUSES, NO RNA STAGE; HERPESVIRIDAE;
 OC GAMMAHERPESVIRINAE; RHADINOVIRUS.
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE; 97094384.
 MOORE P.S., BASHOFF C., WEISS R.A., CHANG Y.;
 "Molecular mimicry of human cytokine and cytokine response pathway
 genes by KSHV";
 SCIENCE 274:1739-1744(1996).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE; 97121480.
 RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D.,
 PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.;
 "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
 (HHV8).";
 PROC. NATL. ACAD. SCI. U.S.A. 93:14862-14867(1996).
 RN [3]
 RP SEQUENCE FROM N.A.
 RA RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D.,
 PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.;
 SUBMITTED (OCT-1996) TO EMBL/GENBANK/DBJ DATA BANKS.
 RN [4]
 RP SEQUENCE FROM N.A.
 RA NICHOLAS J., RUVOLO V.R., BURNS W.H., SANDFORD G., WAN X., CIUFO D.,
 HENDRICKSON S., GUO H.G., HAYWARD G.S., REITZ M.S.;
 SUBMITTED (NOV-1996) TO EMBL/GENBANK/DBJ DATA BANKS.
 RN [5]
 RP SEQUENCE FROM N.A.
 RA RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D.,
 PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.;
 SUBMITTED (MAY-1997) TO EMBL/GENBANK/DBJ DATA BANKS.
 RN [6]
 RP SEQUENCE FROM N.A.
 RX MEDLINE; 97296220.
 NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B.;
 "Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus
 human herpesvirus 8: determinants of its pathogenicity?";
 J. VIROL. 71:4187-4192(1997).
 RN [7]
 RP SEQUENCE FROM N.A.
 RA SUN R., LIN S.-F., MILLER G.;
 SUBMITTED (SEP-1996) TO EMBL/GENBANK/DBJ DATA BANKS.
 RN [8]
 RP EMBL; U75698; G1718266;
 DR EMBL; U74585; G1658273;
 DR EMBL; U93872; G2246346;
 DR EMBL; U71366; G3551763;
 DR PFAM; PF00048; i18; 1.
 KW HYPOTHETICAL PROTEIN.
 RN [9]
 RP SEQUENCE 95 AA; 10485 MW; 5283348D CRC32;

Query Match 69.1% Score 67; DB 14; Length 95;
 Best Local Similarity 58.3%; Pred. No. 4.65e-02;
 Matches 7; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

DB 74 QICADFSKNVR 85